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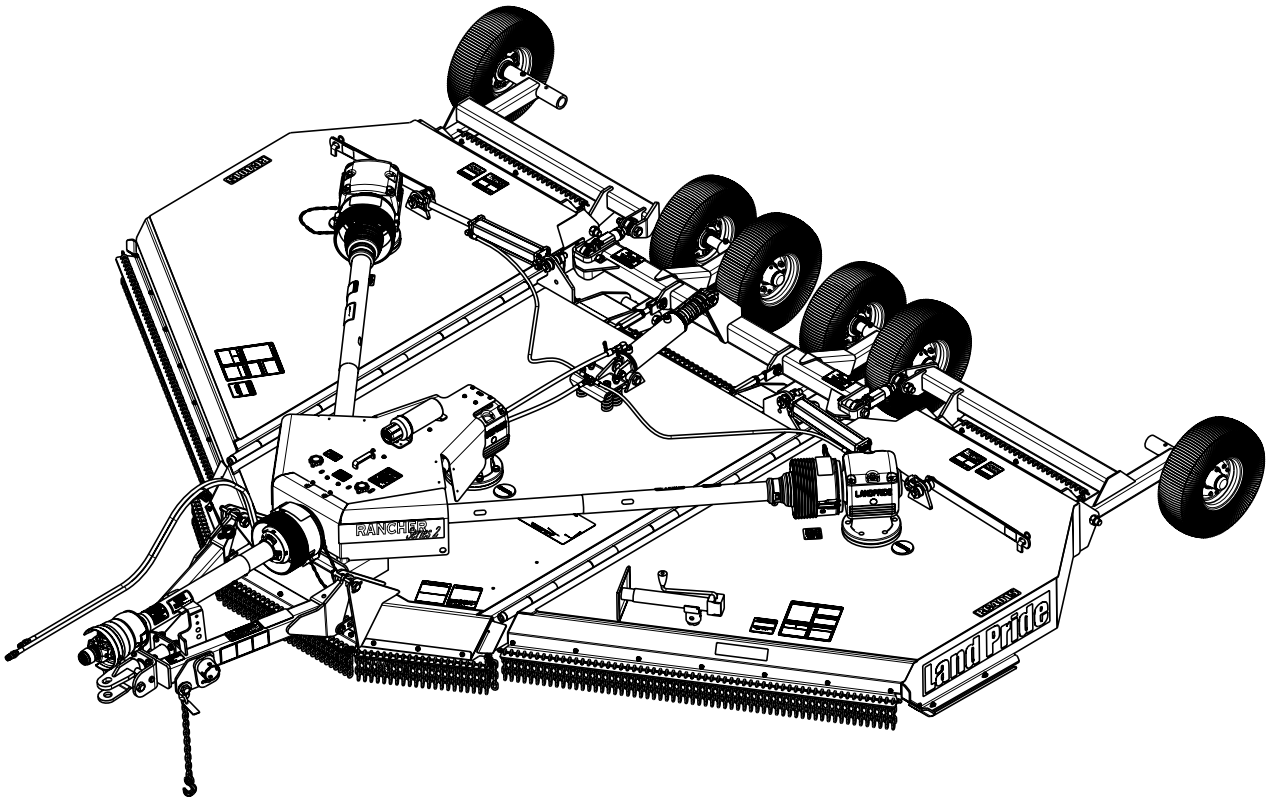
Rotary Cutters

RC4015 and RCM4015 Series 2 S/N 944961+



37900

330-845M
Operator's Manual

Land Pride

Read the Operator's Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

Cover photo may show optional equipment not supplied with standard unit.

 Printed 10/21/15

Printed in the United States of America.

These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Label" section, read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

- ▲ The operator must not use drugs or alcohol as they can change the alertness or coordination of that person while operating equipment. The operator should, if taking over-the-counter drugs, seek medical advice on whether he/she can safely operate the equipment.
- ▲ Operator should be familiar with all functions of the unit.
- ▲ Operate controls from the driver's seat only. Never operate controls from the ground.
- ▲ Make sure all guards and shields are in place and secured before operating implement.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor can cause serious injury or death.
- ▲ Do not allow anyone to stand between tractor and implement while backing up to implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Watch out for fences, trees, rocks, wires, etc., while operating and transporting implement.
- ▲ Turning tractor too tight may cause hitched machinery to ride up on wheels. This could result in injury or equipment damage.

Look For The Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

Be Aware of Signal Words

A Signal word designates a degree or level of hazard seriousness. The signal words are:

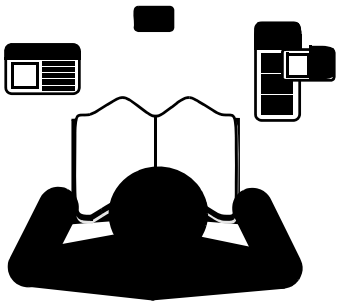
⚠ DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

⚠ WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

⚠ CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

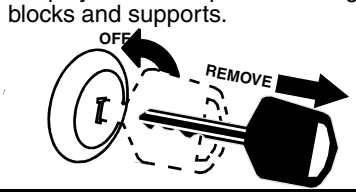
For Your Protection

- ▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



Tractor Shutdown & Storage

- ▲ If engaged, disengage PTO.
- ▲ Lower attached implement to ground, put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
- ▲ Wait for all components to come to a complete stop before leaving the operator's seat.
- ▲ Detach and store implement in an area where children normally do not play. Secure implement using blocks and supports.



Parts Manual QR Locator

The QR (Quick Reference) code on the cover and to the left will take you to the Parts Manual for this equipment. Download the appropriate App on your smart phone, open the App, point your phone on the QR code and take a picture.

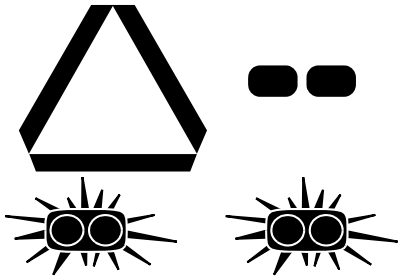
Dealer QR Locator

The QR code on the left will link you to available dealers for Land Pride products. Refer to Parts Manual QR Locator on this page for detailed instructions.

These are common practices that may or may not be applicable to the products described in this manual.

Use Safety Lights and Devices

- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.

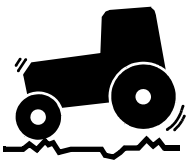


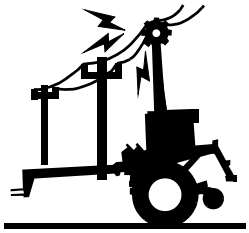
Transport Machinery Safely

- ▲ Comply with state and local laws.
- ▲ Use towing vehicle and trailer of adequate size and capacity.
- ▲ Secure equipment towed on a trailer with tie downs and chains.
- ▲ Sudden braking can cause a trailer to swerve and upset. Reduce speed if trailer is not equipped with brakes.
- ▲ Avoid contact with any over head utility lines or electrically charged conductors.
- ▲ Engage park brake when stopped on an incline.
- ▲ Maximum transport speed for an attached implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrains require a slower speed.
- ▲ As a guideline, use the following maximum speed weight ratios for an attached implement:

  20 mph when weight of attached implement is less than or equal to the weight of machine towing the implement.

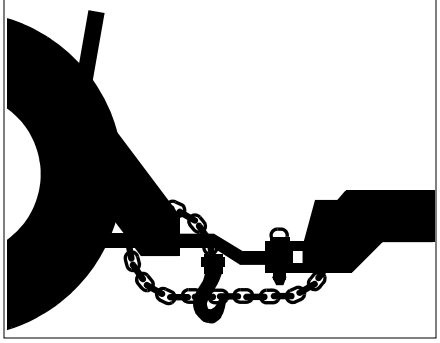
  10 mph when weight of attached implement exceeds weight of machine towing implement but not more than double the weight.
- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of the machine towing the load.





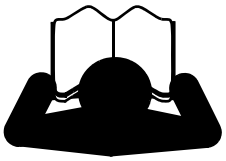
Use A Safety Chain

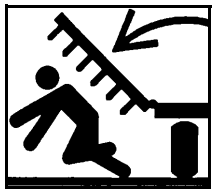
- ▲ A safety chain will help control drawn machinery should it separate from the tractor drawbar.
- ▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
- ▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- ▲ Do not use safety chain for towing.



Practice Safe Maintenance

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower attached implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Allow implement to cool before working on it.
- ▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make certain parts are in good condition & installed properly.
- ▲ Remove buildup of grease, oil, or debris.
- ▲ Remove all tools and unused parts from implement before operation.

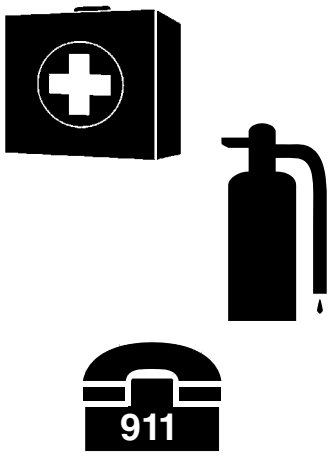




These are common practices that may or may not be applicable to the products described in this manual.

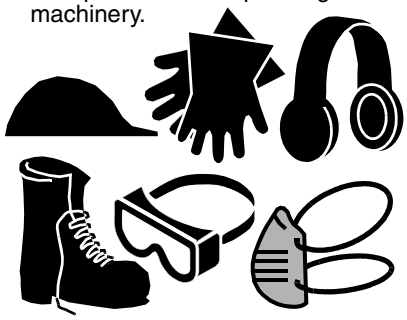
Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital, and fire department near phone.



Wear Protective Equipment

- ▲ Wear protective clothing and equipment appropriate for the job. Clothing should be snug fitting without fringes and pull strings to avoid entanglement with moving parts.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating equipment safely requires the operator's full attention. Avoid wearing radio headphones while operating machinery.



Avoid High Pressure Fluids Hazard

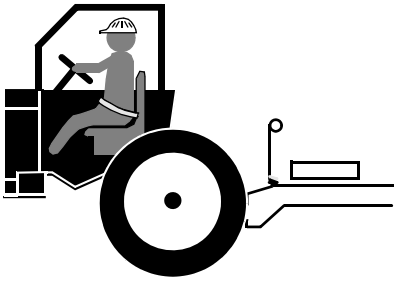
- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines or performing work on the system.
- ▲ Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ **DO NOT DELAY.** If an accident occurs, see a doctor familiar with this type of injury immediately. Any fluid injected into the skin or eyes must be treated within a few hours or gangrene may result.

Tire Safety

- ▲ Tire changing can be dangerous and should be preformed by trained personnel using the correct tools and equipment.
- ▲ When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.

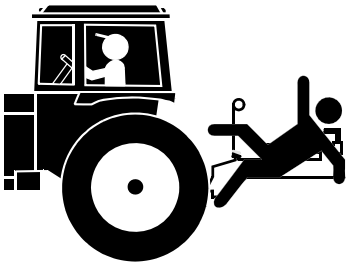
Use Seat Belt and ROPS

- ▲ Operate only tractors equipped with Roll-Over Protective Structure (ROPS) and seat belt.
- ▲ Fasten seat belt snugly and securely to help protect against serious injury or death from falling and tractor overturn.
- ▲ Wearing protective equipment such as safety shoes, safety glasses, hard hat, and ear plugs is highly recommended.



Keep Riders Off Machinery

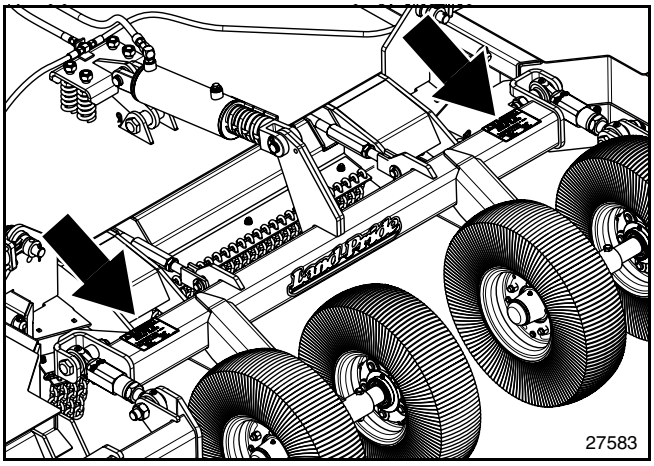
- ▲ Never carry riders or use machinery as a person lift.
- ▲ Riders obstruct operator's view.
- ▲ Riders could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.

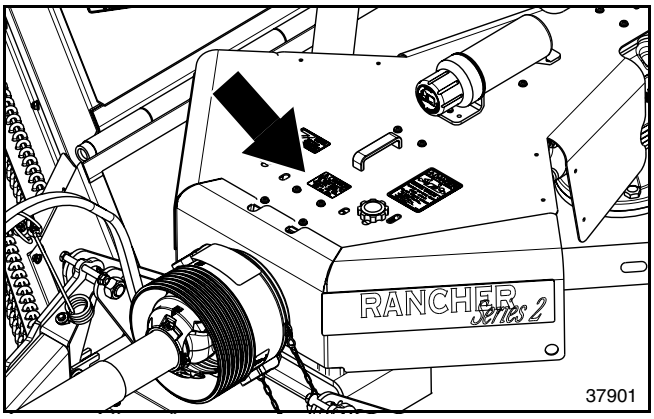


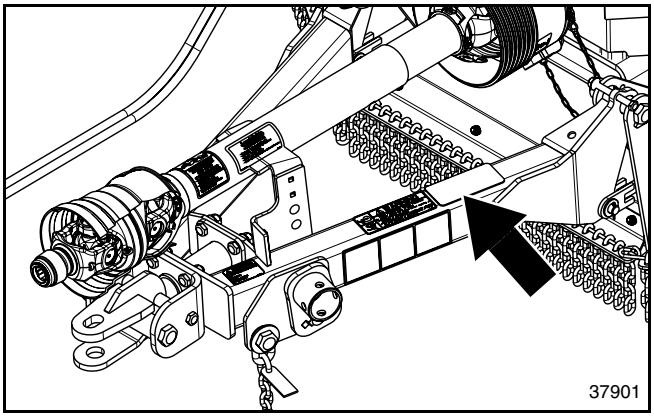
Safety Labels

Your Rotary Cutter comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. *Keep all safety labels clean and legible.*
2. *Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.*
3. *Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.*
4. *Refer to this section for proper label placement.*
   To install new labels:
   a. *Clean surface area where label is to be placed.*
   b. *Spray soapy water onto the cleaned area.*
   c. *Peel backing from label and press label firmly onto the surface.*
   d. *Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.*







818-045C

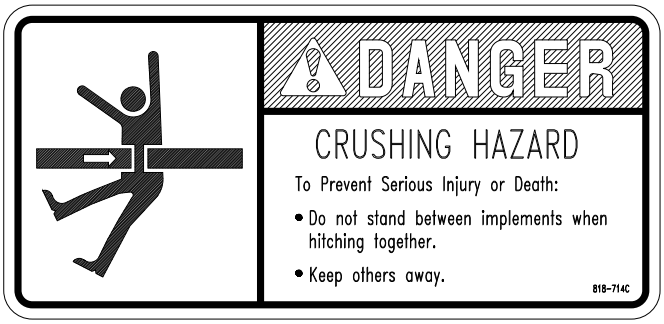
Warning! Pinch Point Warning (1-Place)
Located on the back center axle

818-130C

Caution! Use 540 rpm PTO only (RC Series Cutters)

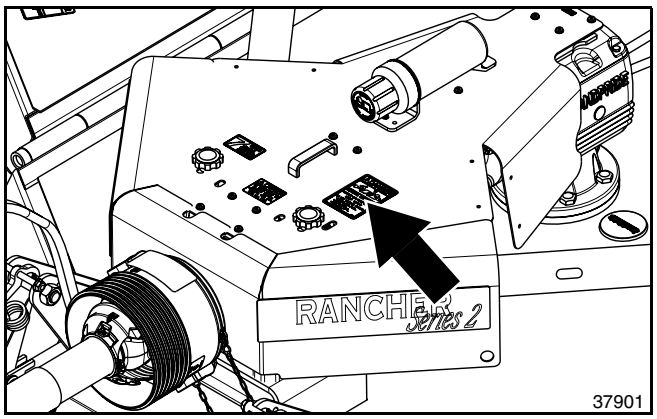
818-240C

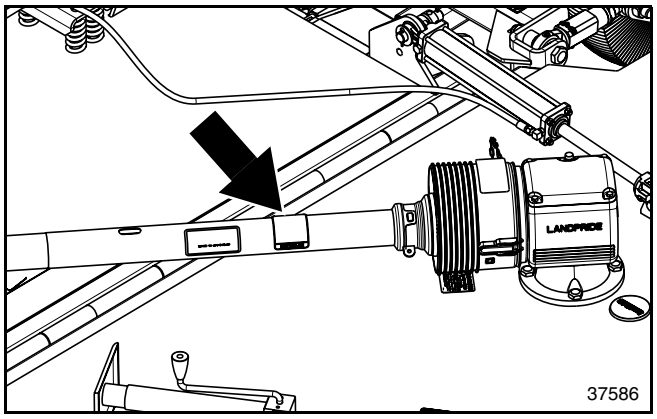
Caution! Use 1000 rpm PTO only (RCM Series Cutters)

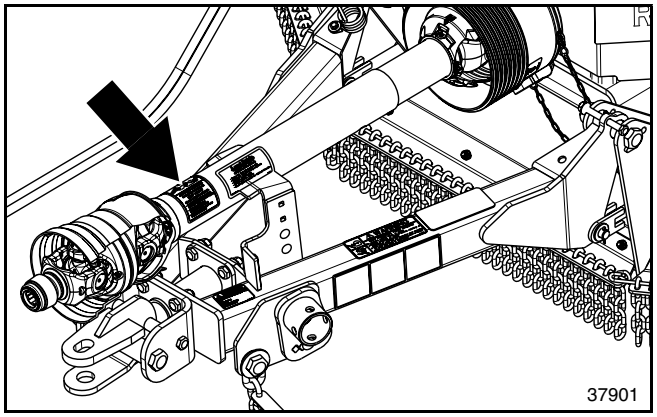


818-714C

Danger! Crushing Hazard





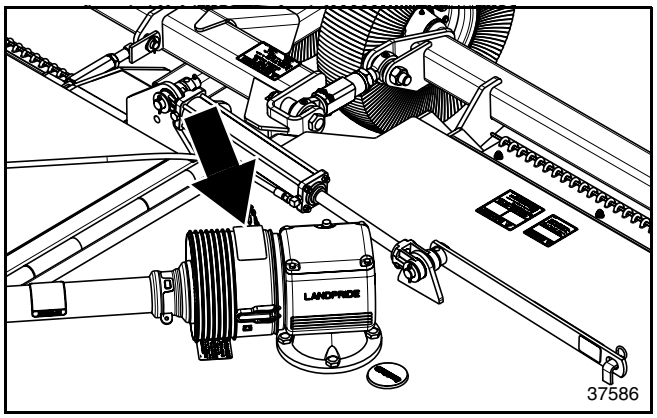


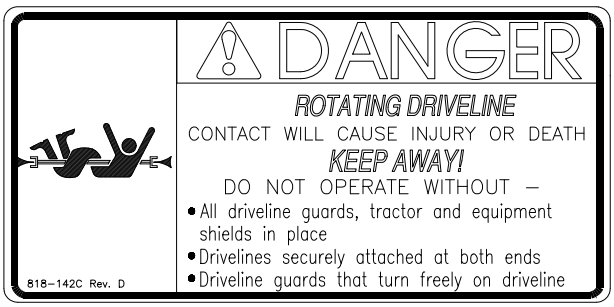
818-552C

Danger! Rotating Driveline - Keep Away

1-Place (Top of splitter shield)

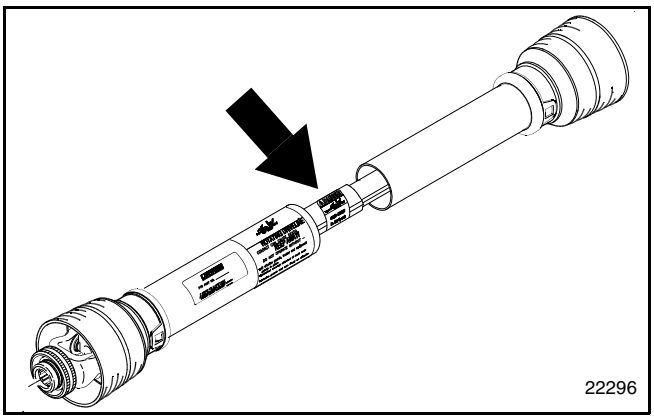
3-Places (Main driveline and 2-wing drivelines)





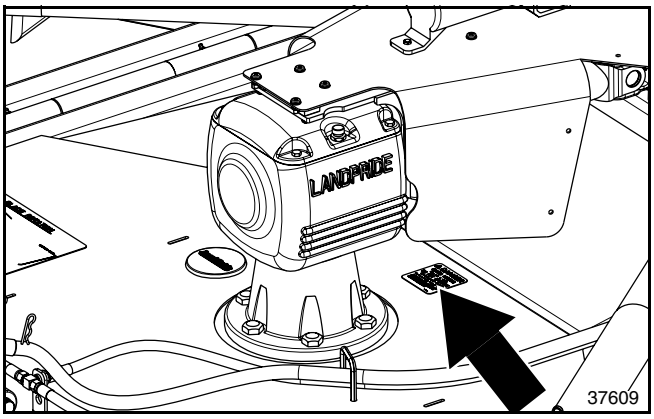
818-142C

Danger! Rotating Driveline - Keep Away (3-Places)
Located on right wing, left wing, and center deck gearbox shields



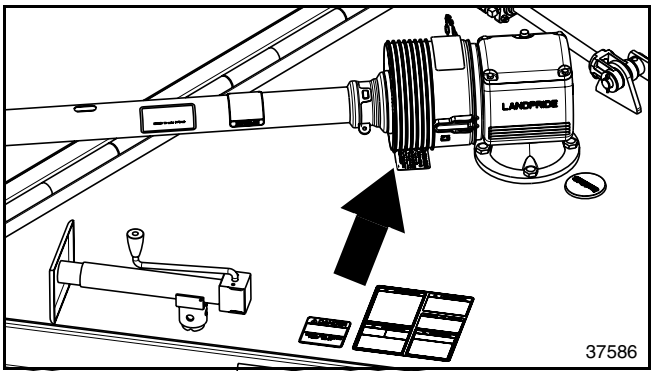
818-540C

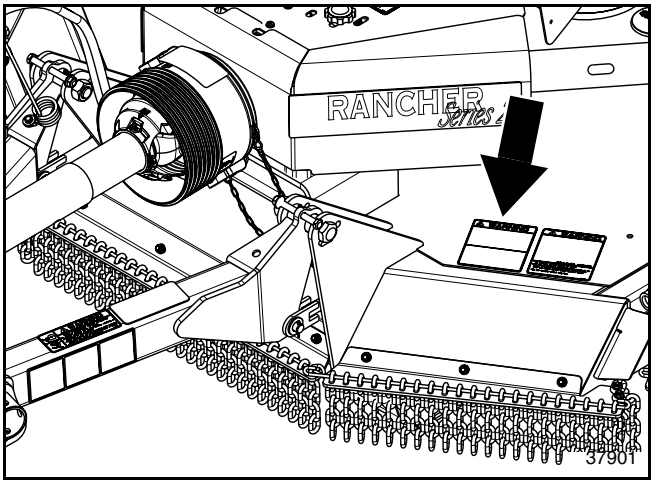
Danger! Shield Missing - DO NOT Operate (3-Places)
Located on main and two wing drivelines

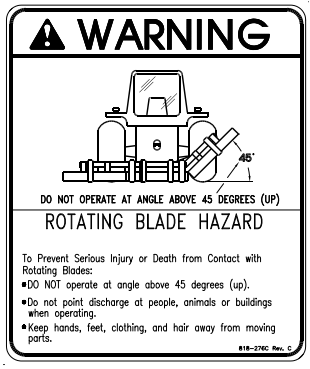


818-543C

Danger! Guard Missing - DO NOT Operate (3-Places)
Located on center deck and both wing decks

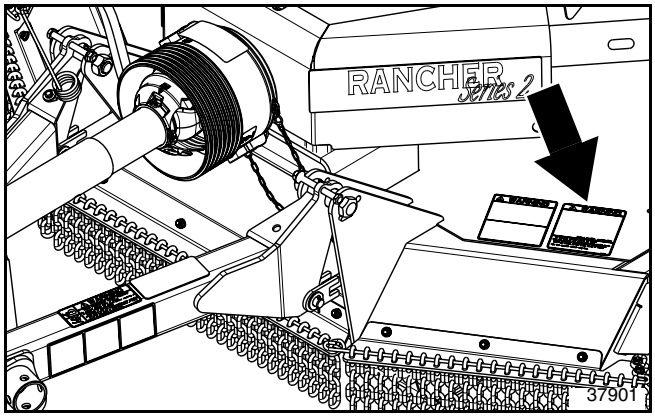


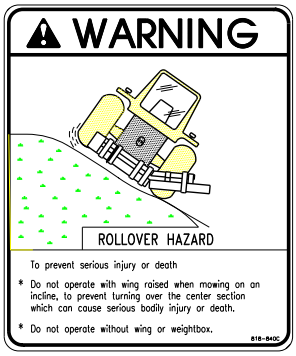




818-276C

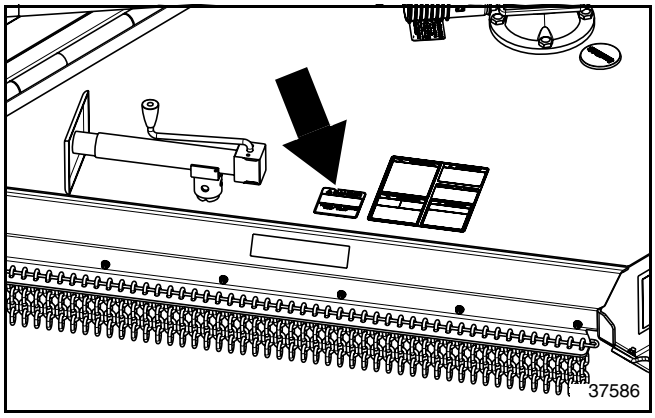
Warning! Rotating Blade Hazard (1-Place)
Located on left side of center deck





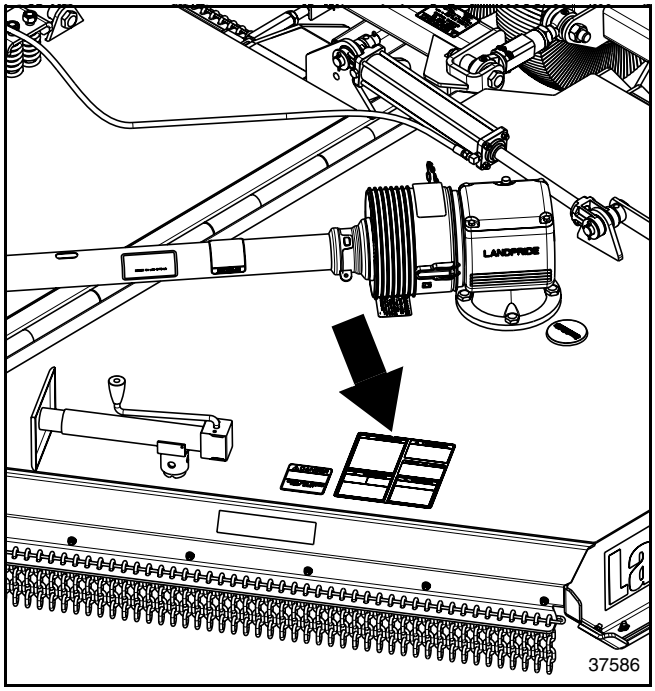
818-840C

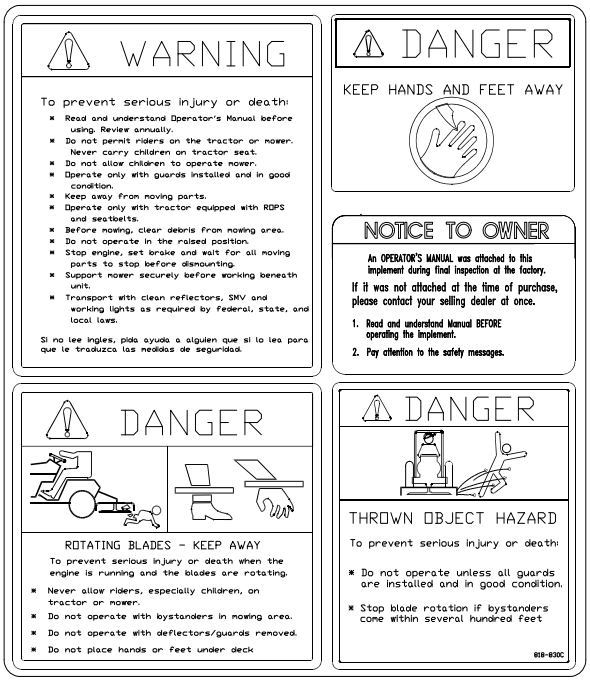
Danger! Rollover Hazard (1-Place)
Located on left side of center deck



818-561C

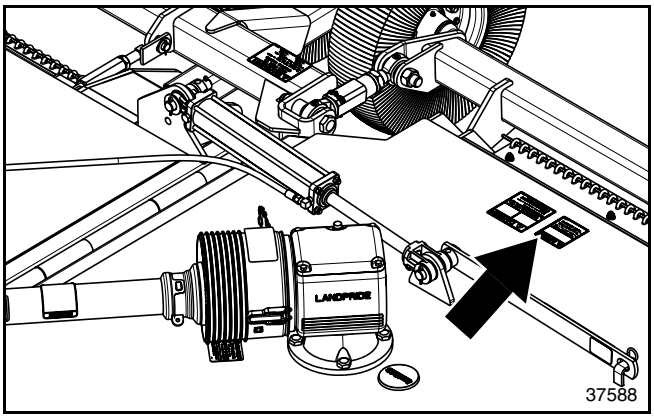
Danger! Raised Wing Hazard (2-Places)
Located on the right and left wing decks





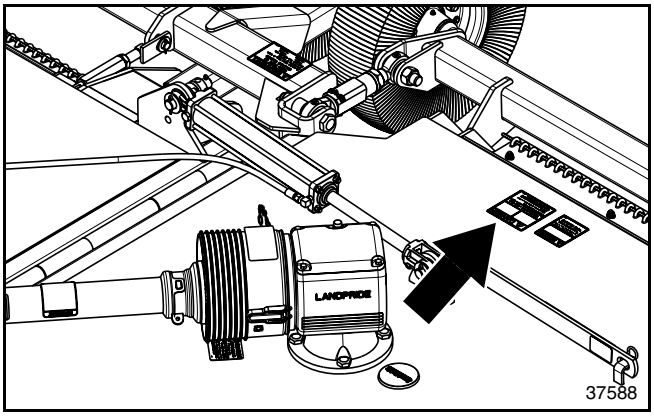
818-830C

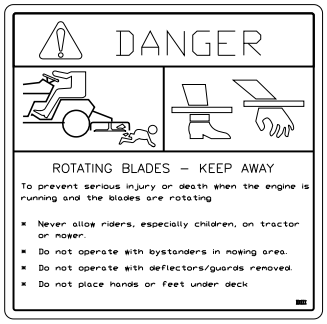
Safety Combo (2-Places)
Located on the right and left wing decks



818-556C

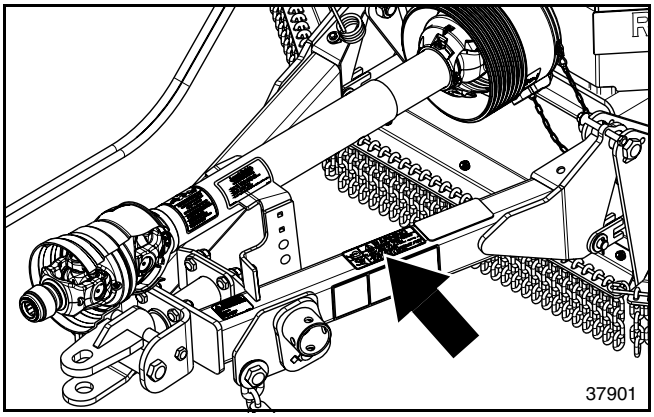
Danger! Thrown Object Hazard (2-Places)
Located on the right and left wing decks





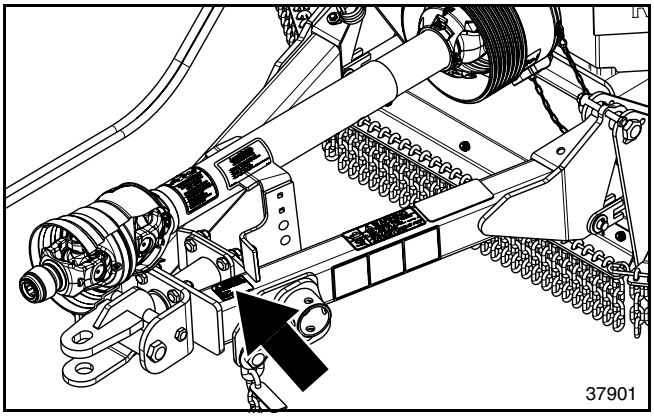
818-564C

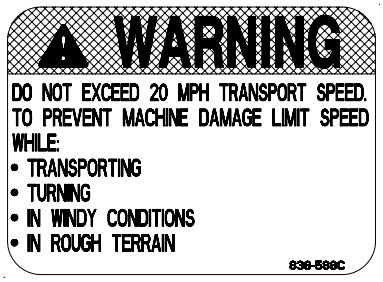
Danger! Rotating Blade (2-Places)
Located on the right and left wing decks



838-094C

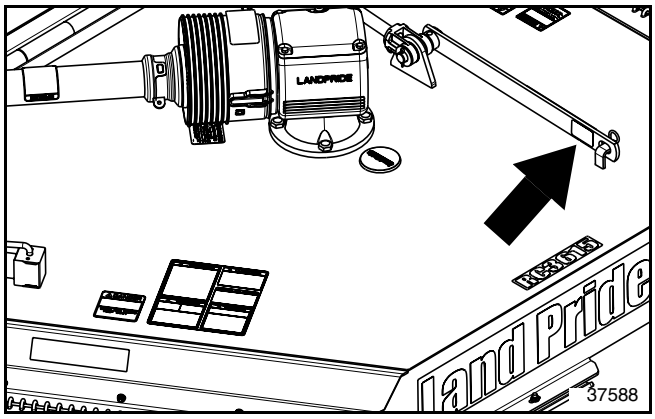
Warning! High Pressure





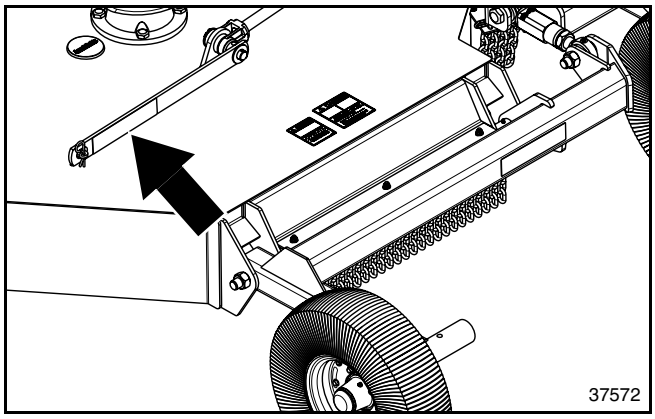
838-588C

Warning! Folding Cutter Speed Warning



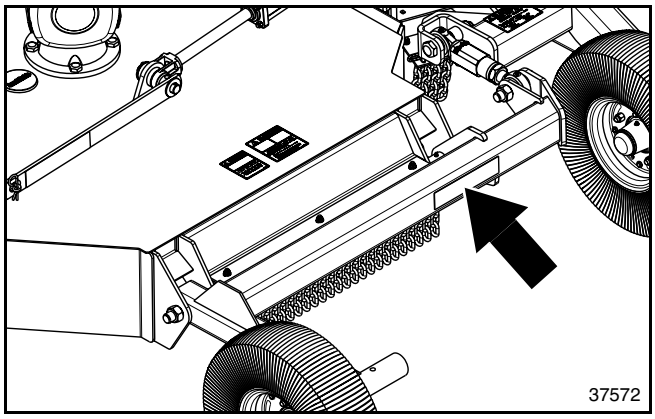
818-229C

1 3/4" x 2 3/4" Amber Reflector
Located on front side of left & right wing lock bars



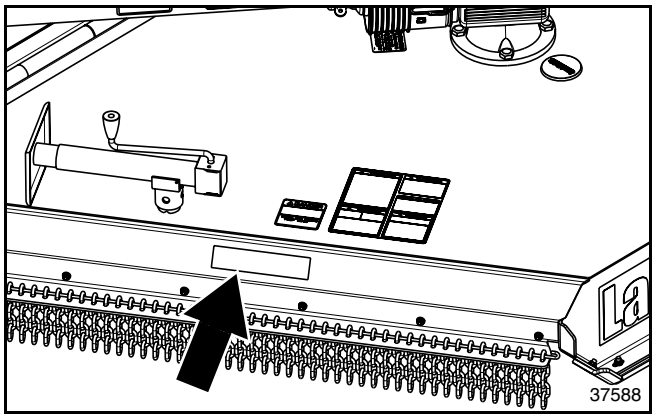
838-614C

2" x 9" Red Reflector
Located on back side of left & right wing lock bars



838-614C

2" x 9" Red Reflector
Located on back side of left & right wing rear axles



838-615C

2" x 9" Amber Reflector
Located on front side of left wing only.

Land Pride welcomes you to the growing family of new product owners.

This Rotary Cutter has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this machine.

Application

The RC4015 and RCM4015 Series 2 Rotary Cutters are designed and built by Land Pride to provide excellent cutting performance on gently sloping or slightly contoured right-of-ways, pastures, set-aside acres, or row crop fields. The 15' cutting width and ability to cut weeds and brush up to 3 1/2" in diameter make them an ideal cutter for a variety of applications.

All listed models offer a pull-type, narrow A-frame hitch, and Cat. 5 conventional or Cat. 6 constant velocity main driveline for attachment to 50-200 HP tractor. The RC4015 attaches to 540 RPM tractors and RCM4015 attaches to 1000 RPM tractors with 1 3/8" PTO shafts.

They are also offered with various optional hitch types, axle configurations, tires, safety guards, and deck rings making them an excellent choice for agricultural, state, and municipal mowing applications.

See **"Specifications & Capacities"** on page 52 and **"Features & Benefits"** on page 54 for additional information and performance enhancing options.

Using This Manual

- This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator's or Parts Manual, contact your authorized dealer. Manuals can also be downloaded, free-of-charge, from our website at www.landpride.com

Terminology

"Right" or "Left" as used in this manual is determined by facing forward in the direction the machine will operate while in use unless otherwise stated.

Definitions

IMPORTANT: A special point of information related to the following topic. Land Pride's intention is this information must be read & noted before continuing.

NOTE: A special point of information that the operator should be aware of before continuing.

Owner Assistance

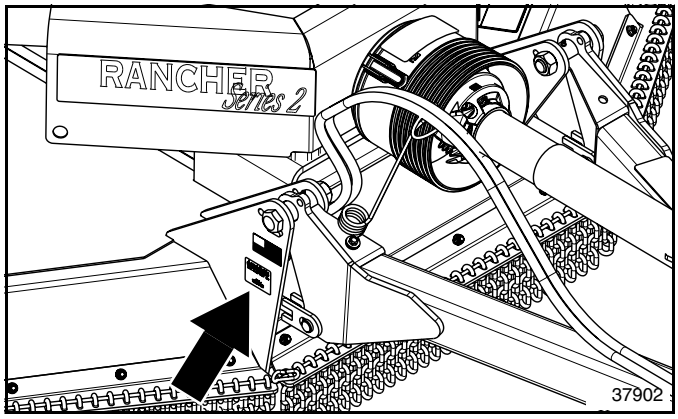
The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

The parts on your Rotary Cutter have been specially designed by Land Pride and should only be replaced with genuine Land Pride parts. Contact a Land Pride dealer if customer service or repair parts are required. Your Land Pride dealer has trained personnel, repair parts, and equipment needed to service the implement.

Serial Number

Model No. _____Serial No. _____

For quick reference and prompt service, record model number and serial number in the spaces provided above and again on warranty page 57. Always provide model number and serial number when ordering parts and in all correspondences with your Land Pride dealer. Refer to Figure 1 for location of your serial number plate.



Serial Number Plate Location
Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new Rotary Cutter. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss the matter with your dealership service manager making sure that person is aware of any problems you may have and has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem, and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060

E-mail address
lpservicedept@landpride.com

Tractor Requirements

Horsepower

WARNING

Do not use too small a tractor. Tractors that are too small can be pushed around and/or flipped over by the weight of the cutter. Tractors that are too large can damage the cutter.

Tractor horsepower should be within the range noted below. Tractors outside the range must not be used.

Horsepower Rating . . . . . 50-200 HP

Drawbar Set-up

Refer to Figure 1-1:

Maintain proper distance, dimension A, between center of drawbar hitch pin hole and end of tractor PTO shaft.

Hitch Type. . . . . Draw Bar

540 RPM & 1 3/8", 1000 RPM Rear PTO Speed:

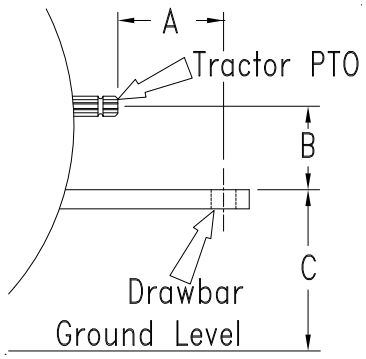
A . . . . . .14"- 16"

B . . . . . 8" - 10"

C . . . . . 18" - 22"

IMPORTANT: PTO damage may occur if distances "A" and "B" are not properly maintained.

IMPORTANT: A PTO adaptor should not be used. Using a PTO adaptor can damage the PTO.



PTO to Drawbar Distance
Figure 1-1

PTO Speed

Rear PTO Speed:

Model RC4015 . . . . . 540 RPM

Model RCM4015 . . . . . .1000 RPM

Hydraulic Outlets

The number of tractor hydraulic duplex outlets is dependent upon how the Rotary Cutter is set-up.

- Two duplex outlets are required if the wings are folded up and down simultaneously. (Factory standard)
- Three duplex outlets are required if the wings are folded up and down independently.
- Float position is highly recommended for the wings.

If the tractor does not have the necessary number of duplex outlets, there are control valve kits available to add outlets. See **"Hydraulic Accessories"** on page 35 for a complete description of this kit.

Before You Start

Read and understand the Operator's Manual for your cutter. An understanding of how it works will aid in the assembly and setup of your cutter.

It is best to go through the **Pre-Assembly Checklist** before assembling the cutter. Speed up your assembly task and make the job safer by having all needed parts and equipment readily at hand.

Torque Requirements

See **"Torque Values Chart for Common Bolt Sizes"** on page 56 to determine correct torque values when tightening hardware. See **"Additional Torque Values"** at bottom of chart for exceptions to common torque values.

Assembly Checklist

	Check	Reference
☐	Have a fork lift or loader with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.	
☐	Have a minimum of two people available during assembly.	
☐	Make sure all major components and loose parts are shipped with the machine.	Operator's Manual
☐	Double check to make sure all parts, fasteners, and pins are installed in the correct location. Refer to the Parts Manual if unsure. By double checking, you will lessen the chance of using a bolt incorrectly that may be needed later. **NOTE:** All assembled hardware from the factory has been installed in the correct location. Remember location of a part or fastener if removed during assembly. Keep parts separated.	Operator's Manual 330-845M Parts Manual 331-970P
☐	Make sure working parts move freely, bolts are tight & cotter pins are spread.	Page 56
☐	Make sure all grease fittings are in place and lubricated.	Page 46
☐	Make sure all safety labels are correctly located and legible. Replace if damaged.	Page 4
☐	Make sure all red and amber reflectors are correctly located and visible when machine is in transport position.	Page 9
☐	Make sure all pneumatic tires are properly inflated and all wheel bolts and axle nuts are tightened to the specified torque.	Page 56

Hitch Types

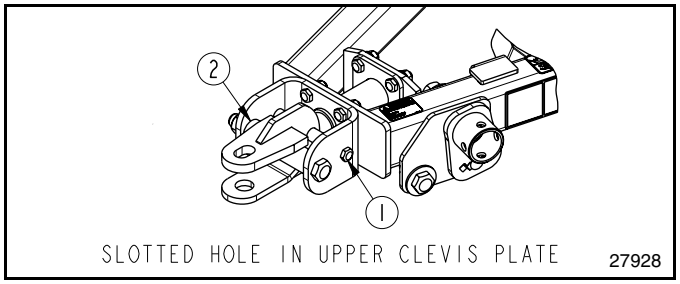
The cutter is factory supplied with the standard clevis hitch. Other optional hitches are available. They include Land Pride Performance hitch, bar-tite hitch, ball hitch, and pintle hitch. See your nearest Land Pride dealer should you want to change your hitch set-up.

Standard Clevis Hitch

Refer to Figure 1-2:

Cutter rotation about the tractor drawbar is limited to slot in the upper clevis plate, hole size in the lower clevis plate, and drawbar hole size. Customer to supply hitch pin and hitch pin keeper.

NOTE: The 5/8" bolt (#1) and spacer (#2) may be removed for more flexibility of hitch. If bolt and spacer are removed, an equal number of washers should be added above the drawbar and below the drawbar to remove gap between drawbar and clevis hitch. Adding washers when bolt and spacer are removed will reduce drawbar and hitch wear.

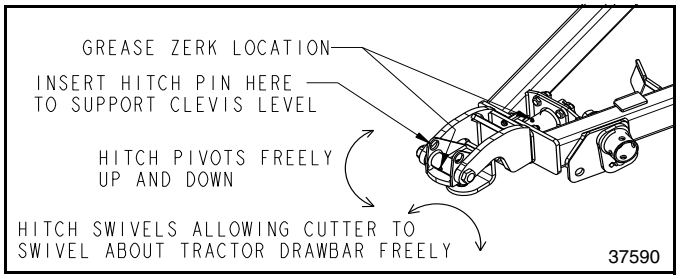


Standard Clevis Hitch
Figure 1-2

Land Pride Performance Hitch (Optional)

Refer to Figure 1-3:

The LP Performance Hitch is a drawbar friendly, self-leveling hitch that pivots up and down, and side-to-side. It is held upright with customer supplied hitch pin to allow single-person hook-up.

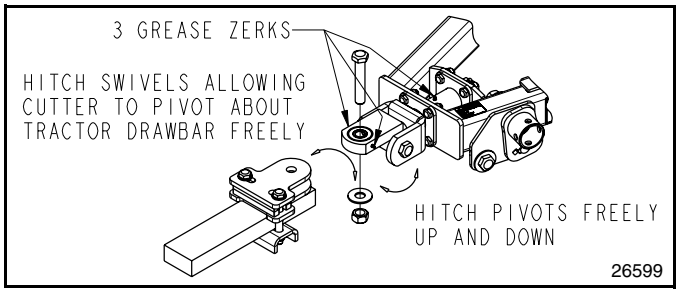


LP Performance Hitch
Figure 1-3

Bar-Tite Hitch (Optional)

Refer to Figure 1-4:

The bar-tite hitch functions similar to LP Performance hitch except it clamps directly to the drawbar. The bar-tite hitch is sandwiched between hardened steel plates to eliminate drawbar wear. It has a bushing in the tongue to extend hitch life. Bushing and hitch swivel are greasable.

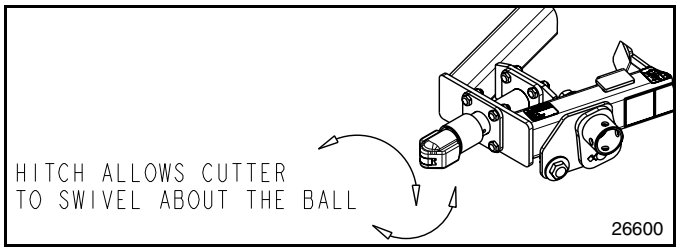


Bar-Tite Hitch
Figure 1-4

Ball Hitch (Optional)

Refer to Figure 1-5:

Cutter rotation about the tractor drawbar is limited to swivel movement over the 2 5/16" tractor mounted ball.

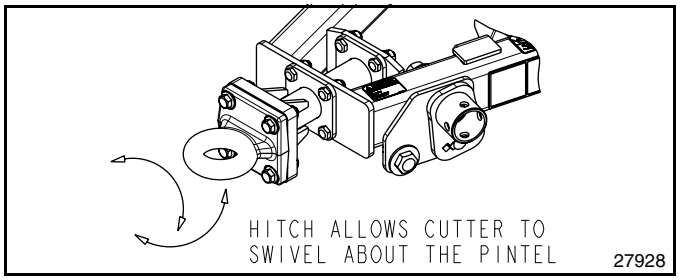


Ball Hitch
Figure 1-5

Pintle Hitch (Optional)

Refer to Figure 1-6:

Cutter rotation about the tractor drawbar is limited to movement about the pintle connection. The pintle hitch is ideal for a drawbar hammer strap.



Pintle Hitch
Figure 1-6

Hitch Assembly

Refer to Figure 1-7:

> **NOTE:** The center deck lift cylinder hose will need to be attached to a tractor before the hitch on the cutter can be rotated down for assembly.

1. Attach center deck lift cylinder hose to a tractor. See Hydraulic Hook-up on page 17 for instructions.
2. Raise cutter up with tractor control lever and remove shipping bracket from center deck cylinder rod.
3. After removal of shipping bracket, lower center deck completely down until it is resting on its skid shoes.
4. Hitch (#1) is shipped hinged up and bolted in place. Remove and discard 1/2" hex whiz nuts (#4) and 1/2" bolts (#3).
5. Rotate hitch down into pulling position as shown and install left and right leveling rods (#1) to hitch frame (#2) with 3/4" x 1 1/2" clevis pins (#6), 3/4" flat washers (#5), and 1/8" x 1 1/4" cotter pins (#7).
6. Bend legs of cotter pins to keep pins from falling out.
7. Leveling rod adjustment will be made after cutter is attached to the tractor.

Park Jack Assembly

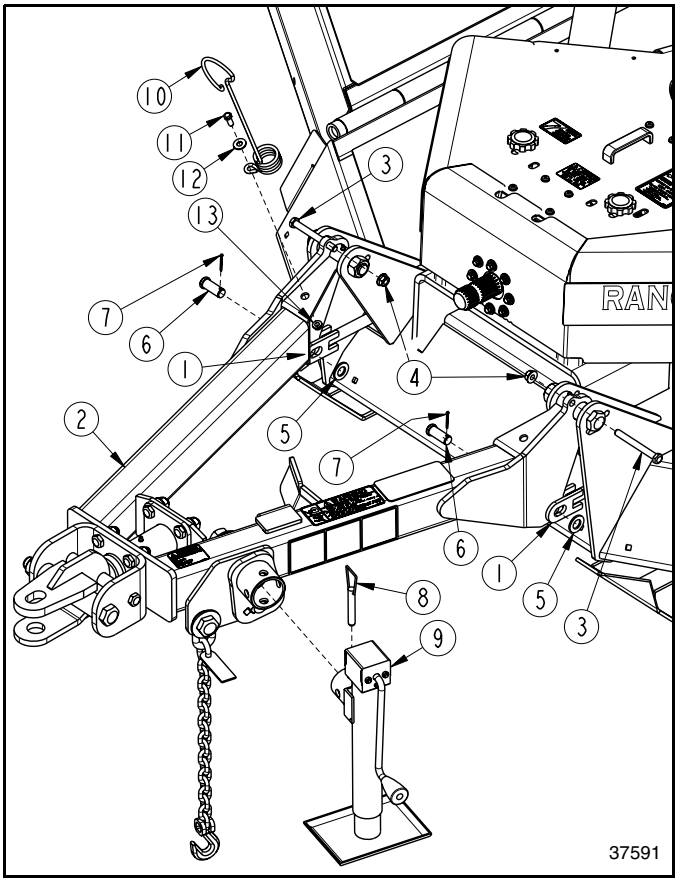
Refer to Figure 1-7:

1. Attach park jack (#9) to jack mount and secure with attached pin (#8).
2. If park jack is not vertical, adjust jack angle according to **"Park Jack Angle Alignment"** on page 24.
3. Adjust jack up or down until clevis hitch (#1) is at drawbar height.

Spring Hose Loop Assembly

Refer to Figure 1-7:

1. Attach spring hose loop (#10) to A-frame hitch (#2) with 3/8"-16 x 1" GR5 bolt (#11), flat washer (#12), and hex flange lock nut (#13).
2. Rotate spring hose loop (#10) to face forward as shown and tighten hex flange lock nut (#13) to the correct torque.



Hitch and Jack Assembly
Figure 1-7

Tractor Shutdown Procedure

The following is proper shutdown procedures. Always follows these procedures before dismounting tractor.

1. If engaged, disengage PTO.
2. Lower attached implement to ground, put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
3. Wait for all components to come to a complete stop before leaving the operator's seat.

Standard Clevis Hitch Hook-up

DANGER

A Crushing Hazard exists when hooking-up equipment to a tractor. Do not allow anyone to stand between tractor and implement while backing-up to implement. Do not operate hydraulic 3-Point lift controls while someone is directly behind the tractor or near the implement.

Refer to Refer to Figure 1-11:

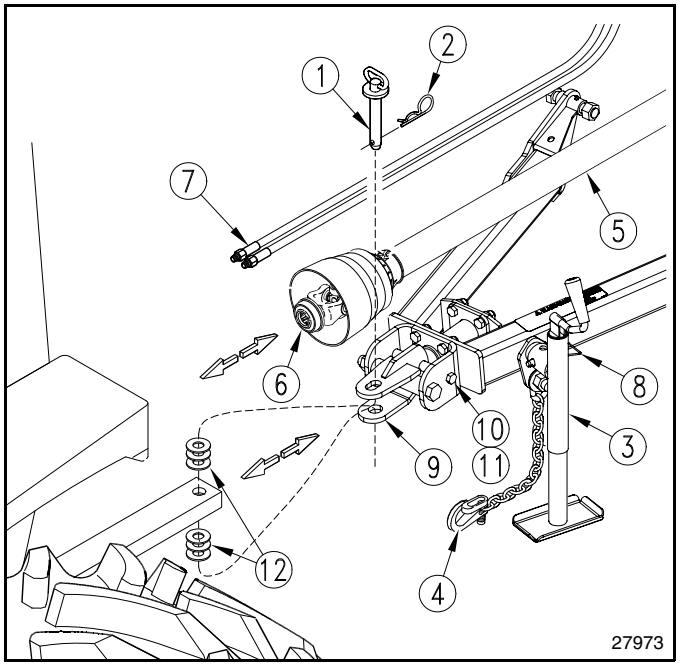
IMPORTANT: Ball detent pin (#8) must be fully inserted in park jack (#3) before working on or around a cutter not hooked to a tractor drawbar.

1. Make certain park jack (#3) is properly attached to the cutter hitch and secured with detent pin (#8). If park jack is not vertical, refer to **"Park Jack Angle Alignment"** on page 24.
2. Store center 3-point link in its storage hook.
3. Start tractor, raise 3-point arms fully up, and carefully back tractor within close proximity of clevis (#9).
4. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on this page.
5. Verify tractor drawbar is adjusted correctly. Refer to **"Drawbar Set-up"** dimensions on page 11.
6. Raise or lower park jack (#3) to align clevis (#9) with tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
7. Restart tractor and continue to back tractor up to cutter hitch until hole in tractor drawbar and holes in hitch clevis (#9) are aligned.
8. Shut tractor down properly before dismounting.

The 5/8" bolt (#10) and spacer (#11) may be removed for more flexibility of hitch. If they are removed, an equal number of flat washers (#12) should be added above drawbar and below drawbar to remove gap between drawbar and clevis hitch. Adding washers with bolt and spacer removed will reduce drawbar and hitch ware.
(Flat washers are customer supplied.)

NOTE: Hitch pin (#1) and hairpin cotter (#2) are supplied by customer.

9. Customer to supply hitch pin and hairpin cotter. Insert hitch pin (#1) through top hole in clevis (#9), tractor drawbar, and out through bottom hole in clevis. Secure hitch pin with hairpin cotter (#2).
10. Lower park jack (#3) until hitch weight is supported by drawbar.



Tractor Hookup to Standard Clevis Hitch
Figure 1-11

IMPORTANT: Protect park jack by storing it on the left wing deck before moving the cutter. Make sure jack is stored with its base level or lower than the head to prevent water and freeze damage.

11. Remove park jack (#3) from hitch and attach it to the left-hand wing storage base with detent pin (#8). Make sure base is level with or lower than the head especially after the wings are folded up. See cover picture for correct positioning.
12. Attach hitch safety chain (#4) to tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.
13. Continue with **"Hydraulic Hook-up"** on page 17 and **"Driveline Installation"** on page 18.

LP Performance Hitch Hook-up

DANGER

A Crushing Hazard exists when hooking-up equipment to a tractor. Do not allow anyone to stand between tractor and implement while backing-up to implement. Do not operate hydraulic 3-Point lift controls while someone is directly behind the tractor or near the implement.

Refer to Figure 1-12:

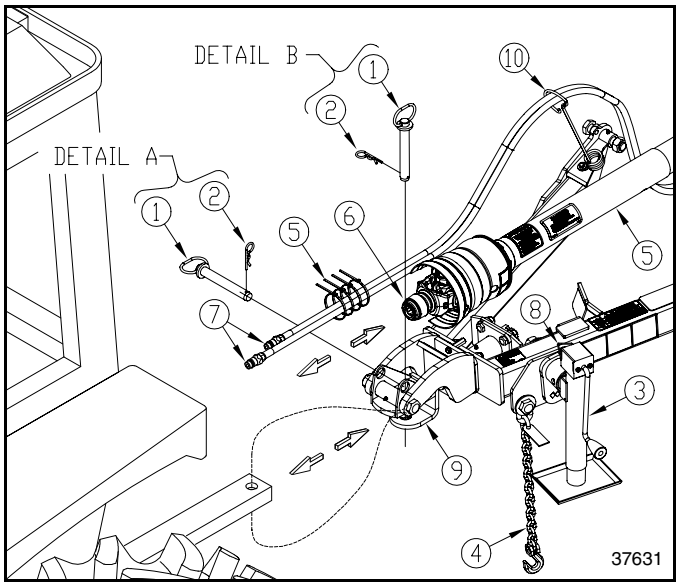
IMPORTANT: Jack detent pin (#8) must be fully inserted and secured before working on or around a cutter that is not hooked to the tractor drawbar.

NOTE: Hitch pin (#1) and hairpin cotter (#2) are customer-supplied.

1. Make certain park jack (#3) is properly attached to cutter hitch and secured with detent pin (#8). If park jack is not vertical, refer to **"Park Jack Angle Alignment"** on page 24.
2. If clevis (#9) is not already supported horizontal, rotate clevis horizontal and insert customer-supplied hitch pin (#1) through horizontal holes in clevis (#9) as shown in detail A. Secure with hairpin cotter (#2).
3. Store center 3-point link in its storage hook.
4. Start tractor, raise 3-point arms fully up, and carefully back tractor within close proximity of clevis (#9).
5. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
6. Verify tractor drawbar is adjusted correctly. Refer to **"Drawbar Set-up"** dimensions on page 11.
7. Raise or lower park jack (#3) to align clevis (#9) with tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
8. Restart tractor and continue to back tractor up to cutter hitch until hole in tractor drawbar and holes in hitch clevis (#9) are aligned.
9. Shut tractor down properly before dismounting.
10. Remove hairpin cotter (#2) and hitch pin (#1) from clevis (#9).
11. Attach cutter to tractor drawbar with hitch pin (#1) and hairpin cotter (#2) as shown in detail B.
12. Lower park jack (#3) until hitch weight is supported by tractor drawbar.

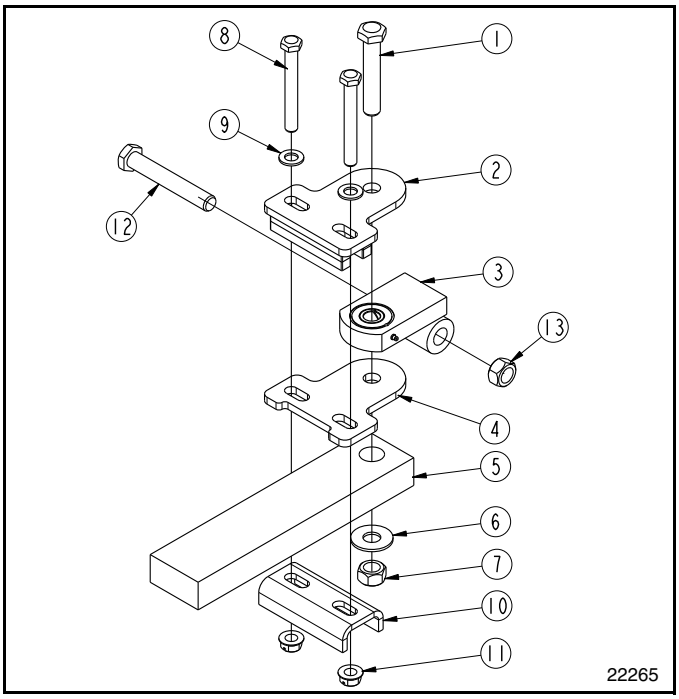
IMPORTANT: Protect park jack by storing it on the left wing deck before moving the cutter. Make sure jack is stored with its base level or lower than the head to prevent water and freeze damage.

13. Remove park jack (#3) from hitch and attach it to the left-hand wing storage base with detent pin (#8). Make sure base is level with or lower than the head especially after the wings are folded up. See cover picture for correct positioning.



Tractor Hookup to LP Performance Hitch
Figure 1-12

14. Attach hitch safety chain (#4) to the tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.
15. Continue with **"Hydraulic Hook-up"** on page 17 and **"Driveline Installation"** on page 18.



Bar-Tite Hitch Assembly to Tractor Tongue
Figure 1-13

Bar-Tite Hitch Hook-up

Attach Bar-Tite Hitch to Tractor Drawbar

Refer to Figure 1-13:

1. Insert 1" x 5 1/2" hex bolt (#1) through hitch top plate (#2), hitch bushing (#3), hitch wear plate (#4), tractor drawbar (#5), and washer (#6) as shown. Secure with 1" locknut (#7). Tighten 1" locknut snugly to remove all play and then back nut one-quarter turn. **Do Not** torque 1" locknut.
2. Insert two 3/4" x 6" GR5 hex bolts (#8) through, 3/4" flat washers (#9), hitch top plate (#2), hitch wear plate (#4), and formed hitch support (#10) as shown. Secure with 3/4" locknuts (#11).
3. Tighten 3/4" locknuts to correct torque.
4. Remove 1" x 6 1/2" GR5 hex bolt (#12) and 1" lock nut (#13) from hitch bushing (#3). Keep bolt and locknut for reuse.

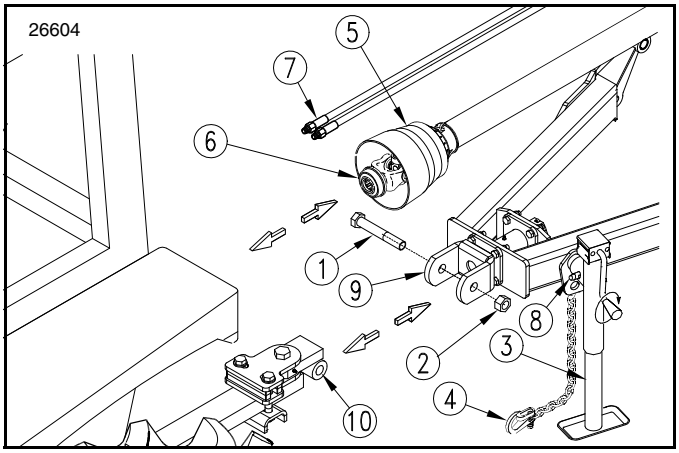
Attach Bar-Tite Hitch to Rotary Cutter

Refer to Figure 1-14:

DANGER

A Crushing Hazard exists when hooking-up equipment to a tractor. Do not allow anyone to stand between tractor and implement while backing-up to implement. Do not operate hydraulic 3-Point lift controls while someone is directly behind the tractor or near the implement.

IMPORTANT: Ball detent pin (#8) must be fully inserted in park jack (#3) before working on or around a cutter not hooked to a tractor drawbar.



Tractor Hookup to Bar-Tite Hitch
Figure 1-14

1. Make certain park jack (#3) is properly attached to cutter and secured with detent pin (#8). If park jack is not vertical, refer to **"Park Jack Angle Alignment"** on page 24.
2. Store center 3-point link in its storage hook.
3. Start tractor, raise 3-point arms fully up, and carefully back tractor within close proximity of clevis (#9).
4. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
5. Verify tractor drawbar is adjusted correctly. Refer to **"Drawbar Set-up"** dimensions on page 11.
6. Raise or lower park jack (#3) to align hitch (#10) with bolt hole in swivel clevis (#9).
7. Restart tractor and back tractor up to swivel clevis (#9) until hole in hitch bushing (#10) aligns with holes in swivel clevis (#9).
8. Shut tractor down properly before dismounting.
9. Insert 1" x 6 1/2" GR5 hex bolt (#1) through swivel clevis (#9) and hitch bushing (#10). Secure hex bolt with locknut (#2). Tighten locknut snugly to remove all play. **Do Not** torque 1" locknut.
10. Lower park jack (#3) until hitch weight is supported by the drawbar.

IMPORTANT: Protect park jack by storing it on the left wing deck before moving the cutter. Make sure jack is stored with its base level or lower than the head to prevent water and freeze damage.

11. Remove park jack (#3) from hitch frame and attach it to the left-hand wing storage base with detent pin (#8). Make sure base is level with or lower than the head especially after the wings are folded up. See cover picture for correct positioning.
12. Attach hitch safety chain (#4) to tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Securely lock chain hook to the safety chain.
13. Continue with **"Hydraulic Hook-up"** on page 17 and **"Driveline Installation"** on page 18.

Hydraulic Hook-up

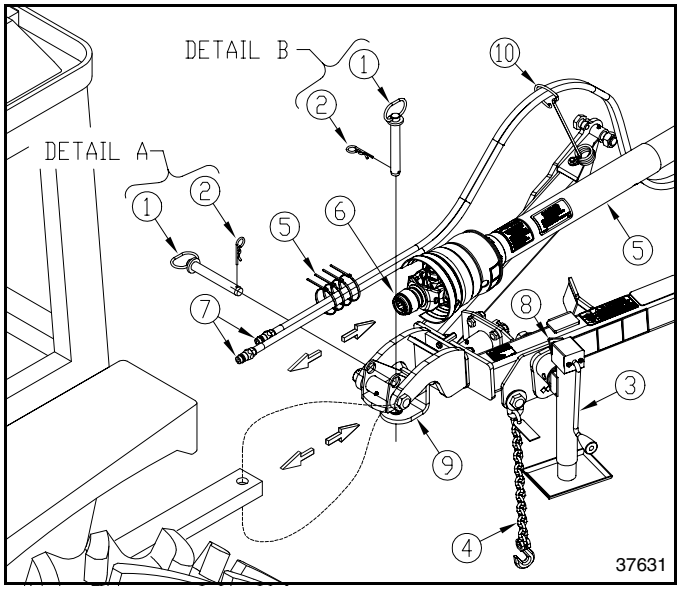
The required number of duplex outlets at the tractor is dependent upon how the cutter is set-up. The standard cutter is equipped with three hydraulic cylinders with one in the center for lifting the cutter and one on each wing for folding the wings simultaneously. All three cylinders are set-up for single action (one-way) operation.

Each duplex outlet on your tractor can perform only one operation. One outlet is needed for lifting the cutter and one for lifting the wings simultaneously. A third outlet is required if wings are lifted independently. This will also require replumbing wing cylinders. Float position is highly recommended for wing outlet(s).

Your Land Pride dealer can help you determine the best configuration that will match your needs and your tractor capabilities. An optional control valve kit is available if the tractor does not have the required number of duplex outlets. For additional information, see **"Selector Control Valve Kit"** on page 35.

⚠ DANGER

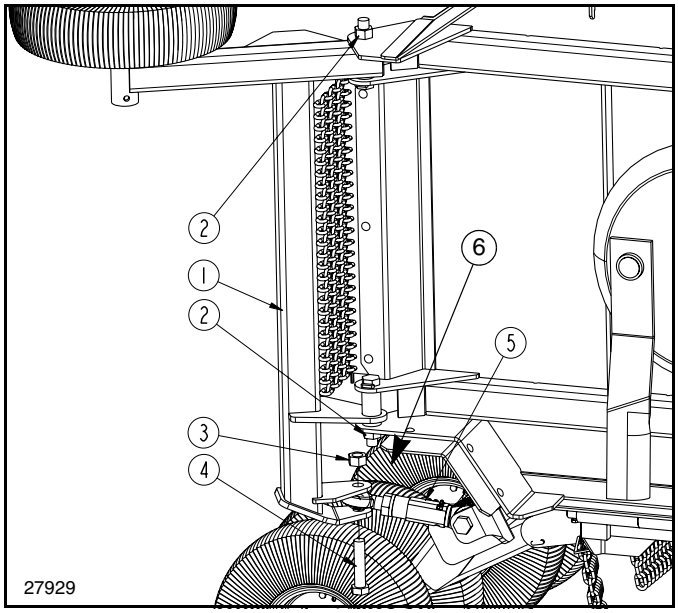
Hydraulic fluid under high pressure can penetrate skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin or eyes, it must be treated by a doctor familiar with this type of injury within a few hours or gangrene may result. DO NOT DELAY.



Hydraulic Hook-up (LP Performance Hitch Shown)
Figure 1-15

Refer to Figure 1-15:

1. Route hydraulic hoses (#7) through hose support loop (#10) and attach couplers to the tractor remote outlets. If tractor has a float option on one of the outlets, connect wing lift hose to that outlet and set tractor control lever for that outlet in float position before cutting.
2. Secure hydraulic hoses together with zip ties (#12) as needed to keep them from pinch areas caused by raising and lowering the deck, folding the wing up and down, and while making turns with the tractor.



Wing Axle - Turnbuckle Assembly
Figure 1-16

Right & Left Wing Set-up

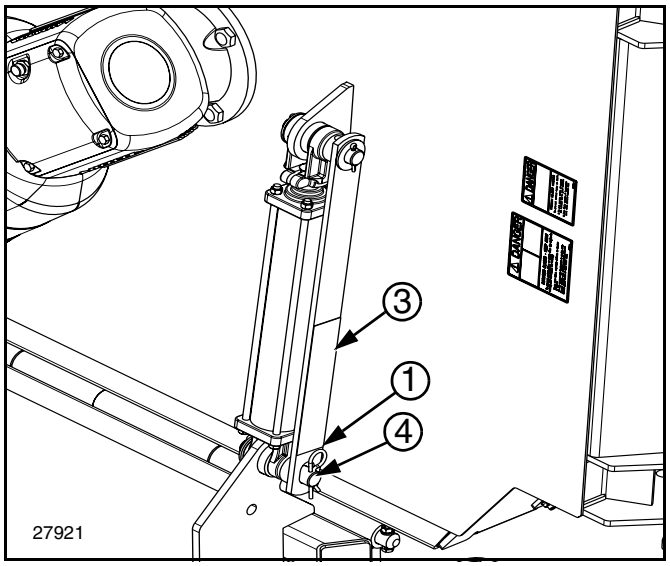
Refer to Figure 1-16:

⚠ WARNING

Connect turnbuckles (#5) to wing axles (#1) before lowering wings. Otherwise, personal injury and/or damage to the turnbuckle can occur.

NOTE: Wing axle locknuts (#2) are tightened for shipping purposes. They must be loosened slightly to allow the axle to pivot. Do not torque them tight.

1. Park tractor and cutter on a level surface.
2. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
3. Cut metal band between the two wing axles.
4. On the right wing axle, loosen lock nuts (#2) slightly to allow rotation of the axle.
5. Remove locknut (#3) and 1 1/4" hex head bolt (#4).
6. Loosen jam nut (#6) on turnbuckle (#5) and adjust until center of ball swivels are approximately 10 1/2" apart. Do not retighten jam nut. Final adjustment will be made later when leveling wing decks.
7. Rotate right axle (#1) until turnbuckle (#5) can be attached to the axle with existing bolt (#4) and lock nut (#3). Tighten locknut (#3) to the correct torque.
8. Tighten locknuts (#2) until snug. Do not over tighten. Wing axle must be able to pivot in the field.
9. Repeat steps 4 thru 6 for the left wing axle.



Transport Bar, Locked Position
Figure 1-17

Lower Wings

DANGER

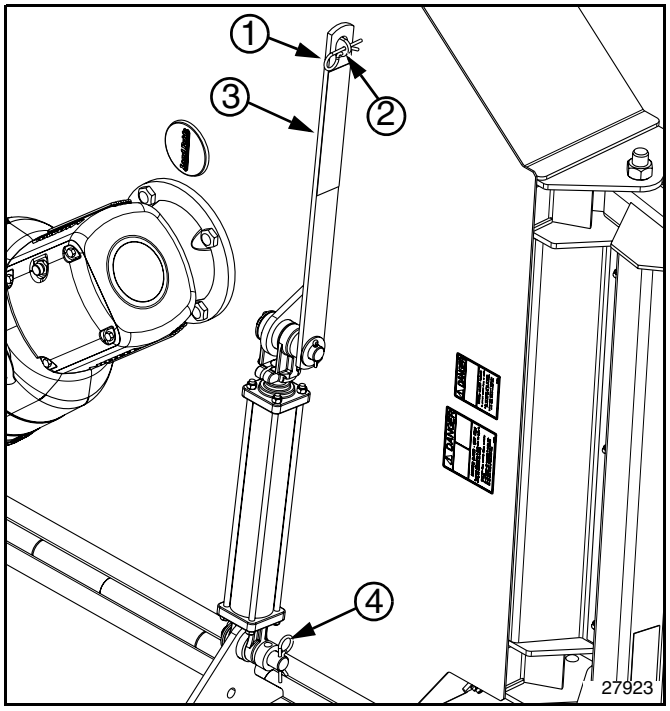
Keep everyone out of the area where the wing decks will unfold into. A wing that falls suddenly on a person will cause serious bodily injury or death.

Refer to Figure 1-17:

1. Park tractor and cutter on a level surface.
2. Raise both wings up to release any tension on transport lock bars (#3).
3. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
4. Remove hairpin clip (#1) from both the left and right cylinder pins (#4).

Refer to Figure 1-18:

5. Rotate end of transport lock bars (#3) to storage pins (#2) on both left and right wings.
6. Secure with hairpin clips (#1).
7. Restart tractor and lower both left and right wings with tractor hydraulic control lever until both wings are on the ground.



Transport Bar, Storage Position
Figure 1-18

Driveline Installation

DANGER

Do not engage tractor PTO while hooking-up and unhooking driveline or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.

WARNING

Always disengage PTO, place tractor in park or set park brake, shut tractor engine off, remove switch key, and wait for blades to stop before dismounting from tractor.

WARNING

Do not operate cutter above its rated PTO speed or machine breakage may result.

WARNING

Make certain all driveline yokes are securely fastened at both ends. A loose yoke can work free allowing the driveline to rotate uncontrollably causing machine damage and bodily injury or death to anyone nearby.

IMPORTANT: Do not attempt to operate a 540 rpm driveline at 1,000 rpm or a 1,000 rpm driveline at 540 rpm. Many tractors provide both 540 and 1,000 rpm PTO modes. Check your tractor's manual to determine its capabilities.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to **"Lubrication Points"** on page 46.

NOTE: Wings must be lowered before removing the driveline from its shipping location. See **"Lower Wings"** on page 18.

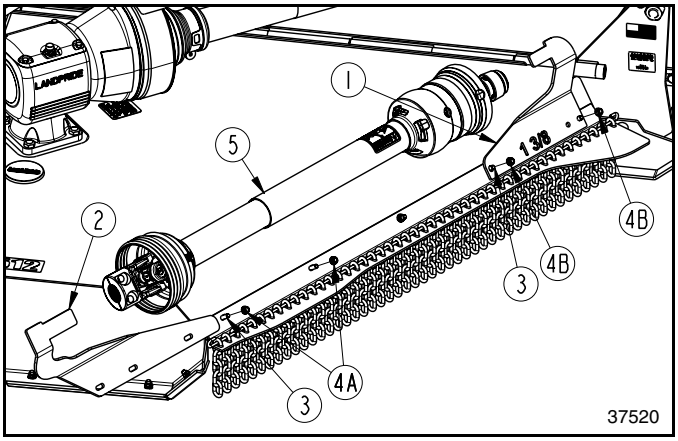
Refer to Figure 1-19:

The main driveline can be constant velocity type or conventional type. Pull-collar and bolted couplers are used to secure the driveline to the tractor and implement gearbox, respectively.

1. Remove hex whiz nuts (#4A), carriage bolts (#3), and shipping bracket (#2). Discard shipping bracket.
2. Slide driveline (#5) off end of shipping bracket (#1). Set driveline aside for attaching to splitter box later.
3. Reinsert carriage bolts (#3) and secure with hex whiz nuts (#4A). Tighten whiz nuts to the correct torque.
4. Remove hex whiz nuts (#4B), carriage bolts (#3), and shipping bracket (#1). Discard shipping bracket.
5. Reinsert carriage bolts (#3) and secure with hex whiz nuts (#4B). Tighten whiz nuts to the correct torque.

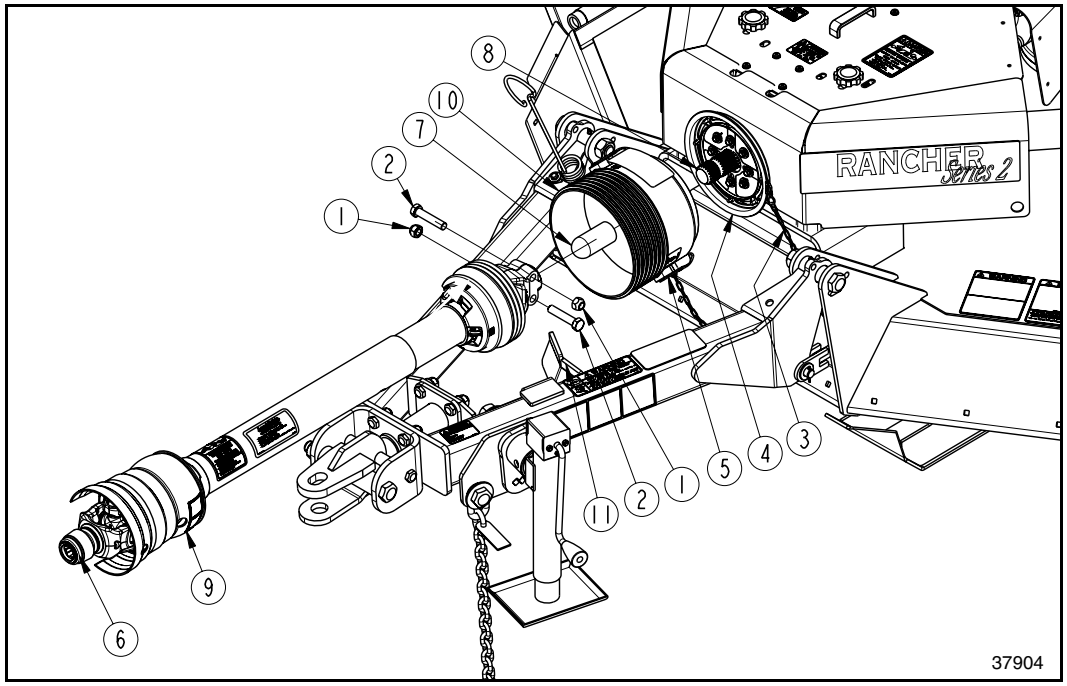
Refer to Figure 1-20:

6. Unsnap latches (#5) on both sides of gearbox shield (#10) and remove gearbox shield.
7. Remove and discard rubber shaft protector (#7) from splitter gearbox shaft (#8).



Remove Main Driveline from Cutter
Figure 1-19

8. Remove locknuts (#1) and bolts (#2) from bolted coupler end of driveline (#9).
9. Insert bolted coupler end of driveline (#9) through gearbox shield (#10) and attach to gearbox input shaft (#8) with removed bolts (#2) and locknuts (#1). Tighten locknuts to the correct torque.
10. Return gearbox shield (#10) to mounting plate (#4) and secure with latches (#5).
11. Check safety chain (#3). Make sure it is latched to mounting plate (#4) and gearbox shield (#10).
12. Rotate driveline hanger (#11) up and support driveline (#9) on hanger. Final adjustments to hanger will be made after tractor hook-up.



Driveline Hook-up to Gearbox Input Shaft
Figure 1-20

Driveline Hook-up to Tractor PTO

Refer to Figure 1-21:

1. If needed, collapse driveline (#5) by pushing tractor end of driveline against splitter gearbox.
2. Pull back on yoke locking collar (#6) and slide yoke over tractor PTO shaft.
3. Release locking collar (#6) and continue to push outer yoke onto tractor PTO shaft until locking collar snaps in place.
4. Both yoke ends of driveline (#5) should be moved back and forth to ensure they are secured. Reattach yoke end if it is loose.

IMPORTANT: Always rotate driveline hanger down after hook-up to prevent driveline damage.

5. Rotate driveline hanger (#1) down.
6. If park jack (#3) is attached to the hitch, it should be removed and stored on the left-hand wing. For detailed instructions, see steps 12 & 13 on page 15.

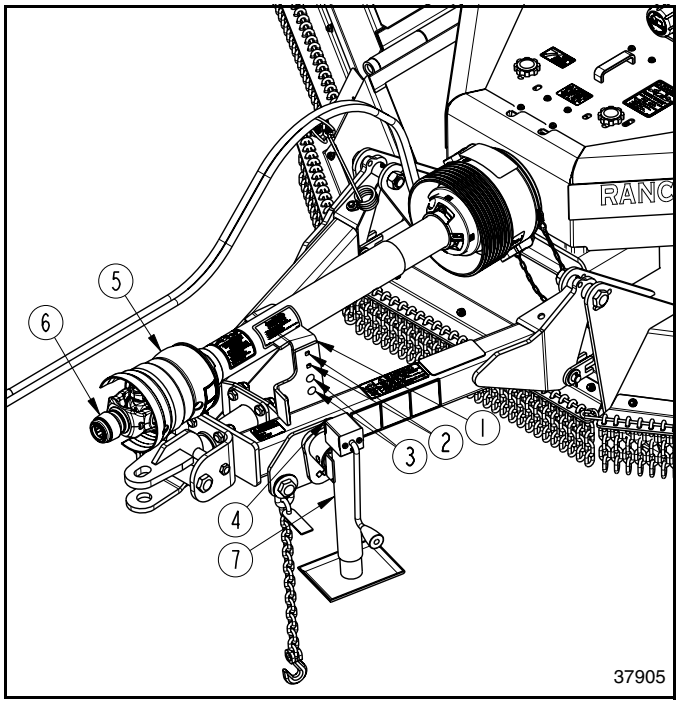
Adjust Driveline Hanger

Refer to Figure 1-22:

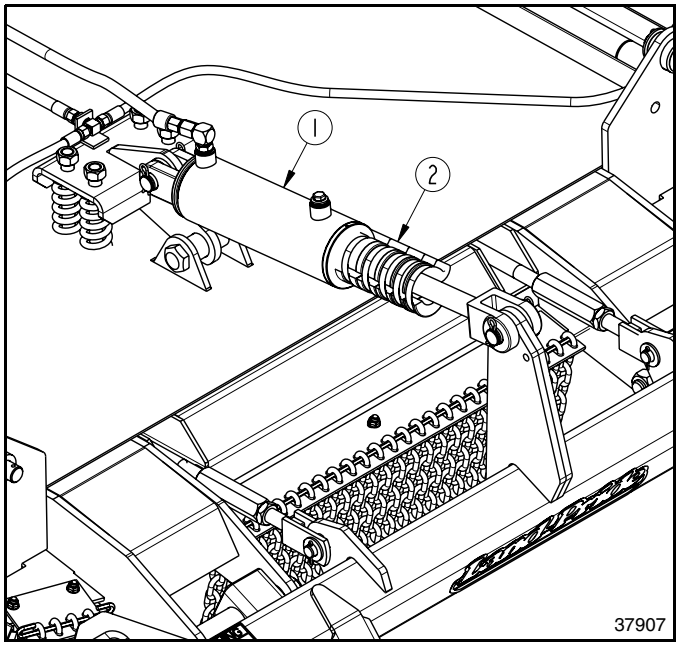
1. Move tractor control lever to extend hydraulic lift cylinder (#1) until pressure against stroke control spacers (#2) is removed.
2. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
3. Remove all stroke control spacers (#2) from center hydraulic lift cylinder (#1) by spreading them apart at the break line.
4. Start tractor and lower cutter until front skids are resting on the ground or on support blocks.
5. Shut tractor down properly before dismounting.
6. Replace stroke control spacers (#2) as needed to support wheels at this position.

Refer to Figure 1-21:

7. With driveline attached to tractor, rotate driveline hanger (#1) up as shown.
8. Loosen nuts securing carriage bolts (#3) and adjust driveline hanger (#1) to be close to under side of driveline (#5).
9. If driveline hanger (#1) is adjusted fully up and needs to adjust higher, remove carriage bolts (#3) and reattach hanger to the upper two square holes (#2) with existing flat washers, lock washers, hex nuts, and carriage bolts (#3). Continue to adjust hanger to underside of driveline.
10. Draw nuts securing carriage bolts (#3) up snug and rotate driveline hanger (#1) down. If hanger makes contact with driveline (#5), readjust hanger down until it misses the driveline.



Adjust Driveline Hanger
Figure 1-21

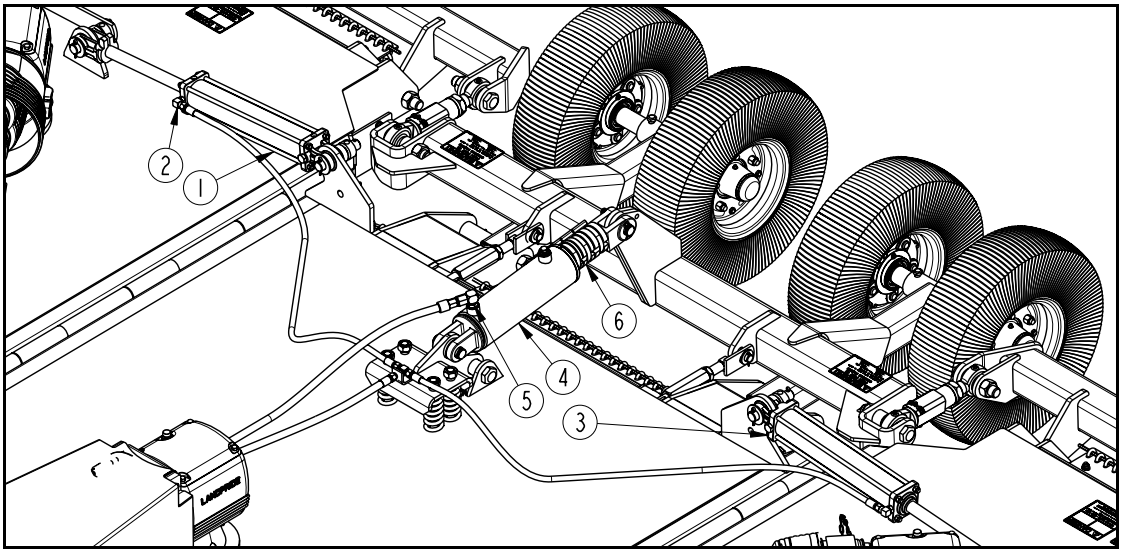


Hydraulic Lift Cylinder With Stroke Control Spacers
Figure 1-22

11. Tighten 3/8"-16 GR5 bolts (#3) to the correct torque.

IMPORTANT: Always rotate driveline hanger down before moving cutter to prevent damage to driveline.

12. Rotate driveline hanger (#1) down.



Purge Wing cylinders & Deck Lift Cylinder
Figure 1-23

Driveline Clearance Check

Check driveline for adequate clearance under all ranges of cutter height.

1. With driveline shaft attached to the tractor and all stroke control spacers (#4 in Figure 1-22) removed from hydraulic cylinder (#1), slowly raise and lower cutter to its upper and lower limits while observing clearances between hitch and driveline. Adjust tractor drawbar height and/or length if driveline interferes. See Figure 1-1 on page 11 for correct drawbar dimensions.
2. It may be necessary to purge lift cylinder, wing cylinder, and hydraulic hoses of trapped air if operation is sluggish. Cycle cylinders back and forth several times to purge air from them. For additional details, see **"Purge Hydraulic System"** below.

Purge Hydraulic System

⚠ DANGER

Never remove or install a folding wing cylinder with cylinder rod retracted and wing folded up. The wing is unstable without its folding cylinder and can suddenly fall. Also, air trapped in a new or repaired cylinder will drop the wing suddenly when lowering the wing. Either situation can render the cutter inoperable and cause serious bodily injury or death.

⚠ WARNING

Be sure center and wing decks are lowered to the ground and all hydraulic pressure is relieved before disconnecting any hydraulic lines or fittings between the Rotary Cutter and tractor hydraulic system.

Refer to Figure 1-23:

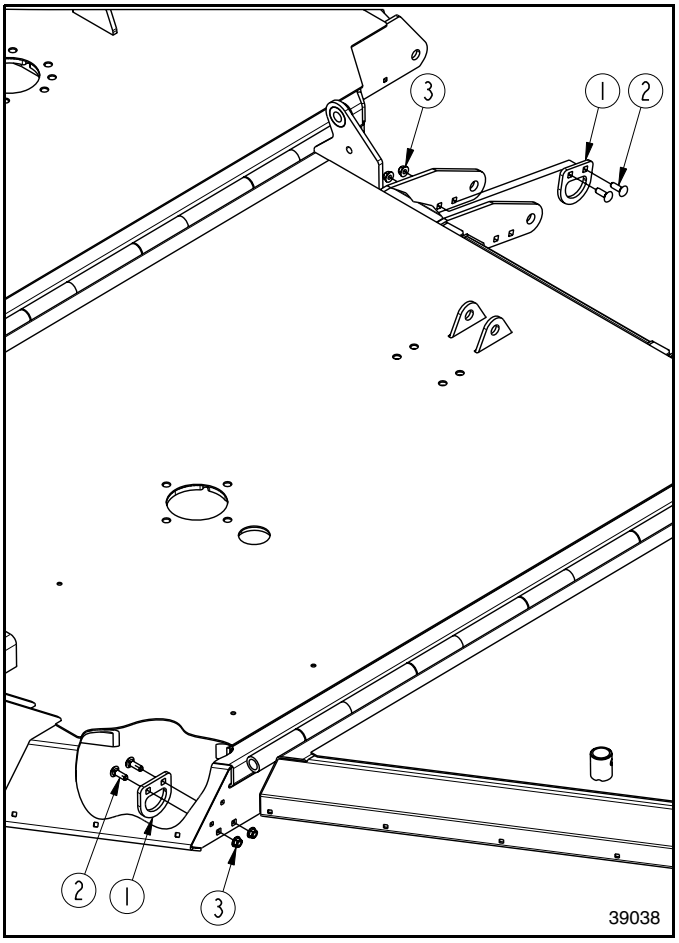
Wing Fold Cylinder

1. Lower center deck until it is supported by stroke control spacers (#6) on hydraulic cylinder (#4).
2. Lower wing decks until they are resting on the ground.
3. See **"Tractor Shutdown Procedure"** on page 13. Shut tractor down properly and move wing control levers back and forth to relieve all hydraulic pressure.
4. Slightly loosen hydraulic hose fitting (#2) at right-hand wing cylinder (#1) to allow air to escape.
5. Restart tractor and slowly activate tractor control lever to retract wing cylinder (#1), and to purge trapped air from the hydraulic system.
6. Repeat steps 1 thru 3 above once air is purged from the right-hand wing cylinder.
7. Tighten hose fitting at the right-hand wing cylinder.
8. Repeat steps 4 thru 7 above to purge the left-hand wing cylinder (#3).

Deck Lift Cylinder

Refer to Figure 1-23:

1. Lower center deck until it is supported by stroke control spacers (#6) on hydraulic cylinder (#5).
2. See **"Tractor Shutdown Procedure"** on page 13. Shut tractor down properly and move deck lift control lever back and forth to relieve all hydraulic pressure.
3. Slightly loosen hydraulic hose fitting (#5) at deck lift cylinder (#4) to allow air to escape.
4. Restart tractor and slowly activate tractor control lift lever to extend lift cylinder (#4) and to purge trapped air from the hydraulic system.
5. Repeat steps 1 & 2 above once air is purged from the deck lift hydraulic system.
6. Tighten hose fitting (#5) at lift cylinder (#4).



Remove Shipping Lugs
Figure 1-22

Remove Shipping Lugs

Refer to Figure 1-22:

Tie down lugs are installed on all four corners of the center deck for shipping purposes only. They should be removed and discarded before cutter is put into use.

1. Remove and discard all four shipping lugs (#1) and attaching hardware (#2 & #3).

Unhook Rotary Cutter

1. See **"Long-term Storage"** on page 44 when parking the cutter for long periods and at end of season.
2. Disengage PTO, park cutter on a level, hard surface. Place tractor gear selector in park or set park brake.

Refer to Figure 1-24 on page 23:

3. Wait for blades to come to a complete stop and then fold wings up to transport position.
4. Shut tractor engine off and remove switch key before dismounting from tractor.
5. Remove hairpin clips (#1) from storage pins (#2).

Refer to Figure 1-25 on page 23:

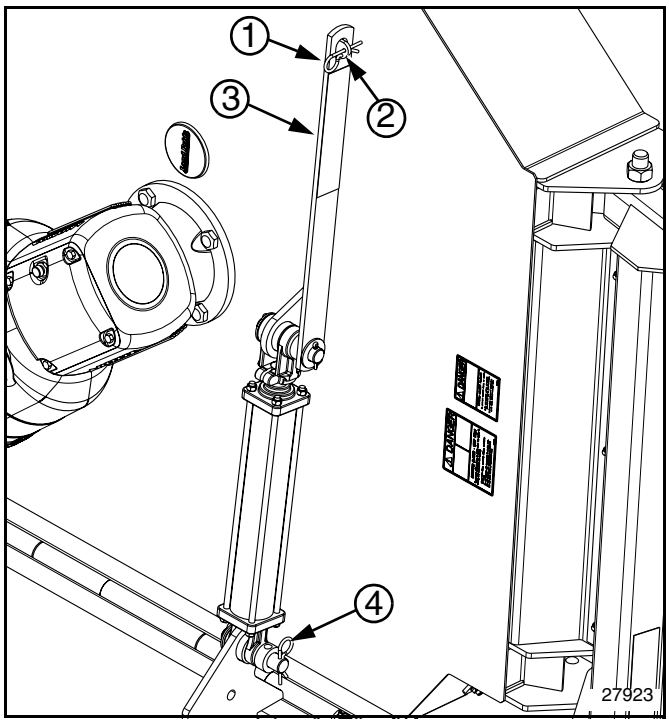
6. Swing transport lock bars (#3) down and place over lock pins (#4). Secure with hairpin clips (#1).

Refer to Figure 1-26 on page 23:

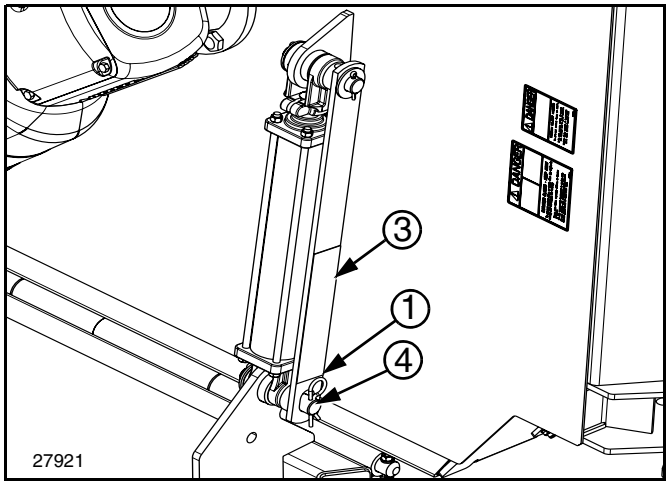
7. Remove all stroke control spacers (#2) from center hydraulic cylinder (#1) by spreading them apart at the break line.
8. Start tractor and lower cutter until front skids are resting on the ground or on support blocks.
9. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
10. Replace stroke control spacers as needed to support wheels at this position.
11. With no one around or near the cutter, move cylinder deck and wing cylinder lift levers back and forth to release all hydraulic pressure at the couplers.

Refer to Figure 1-27 on page 23:

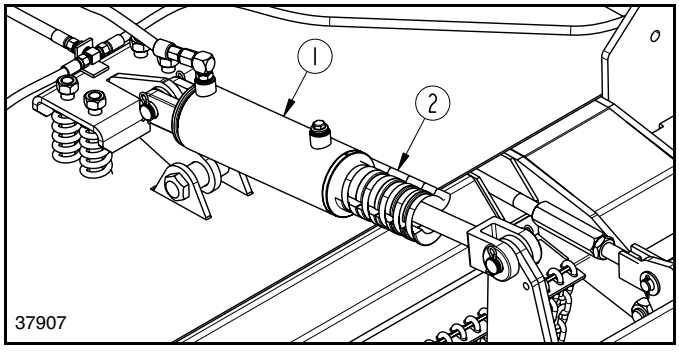
12. Remove park jack (#3) from left-hand wing deck and attach to jack mount (#12) as shown. Fully insert detent pin (#8) in jack mount to secure park jack.
13. If needed, realign park jack to be vertical. Refer to **"Park Jack Angle Alignment"** on page 24.
14. Unhook hitch safety chain (#4) from tractor.
15. Unhook hydraulic hoses (#7) from tractor duplex outlet. Insert couplers through spring hose loop (#10) to keep couplers out of the dirt.
16. Pull back on locking collar (#6) and pull driveline (#5) from tractor PTO shaft.
17. Collapse driveline (#5) by pushing tractor end of driveline toward the splitter gearbox.
18. Rotate driveline hanger (#11) up to position shown and store driveline on hanger.
19. Adjust park jack (#3) as needed and remove connecting pin/bolt (#1) from cutter hitch (#9).
20. Restart tractor and drive tractor slowly forward several feet.
21. Shut tractor down properly before dismounting.
22. Lower park jack until cutter is resting on its front skid shoes.
23. Continue with instructions on page 23.



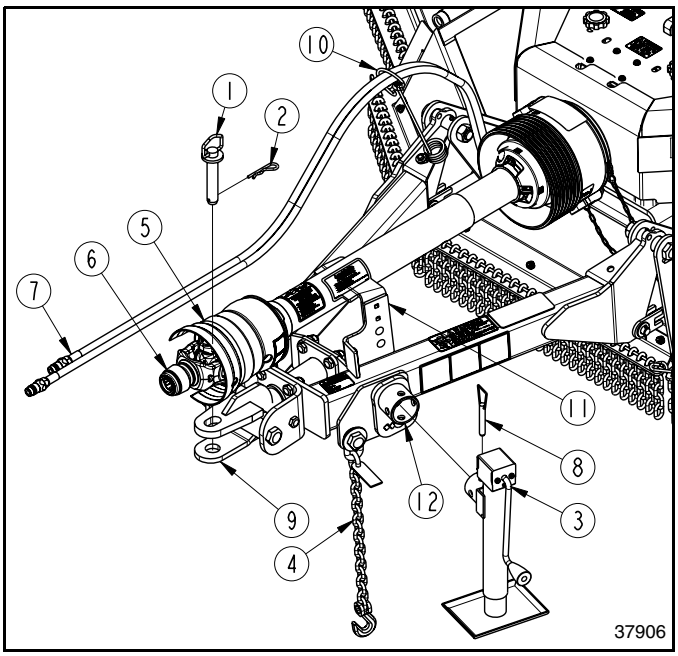
Transport Bar, Storage Position
Figure 1-24



Transport Bar, Locked Position
Figure 1-25

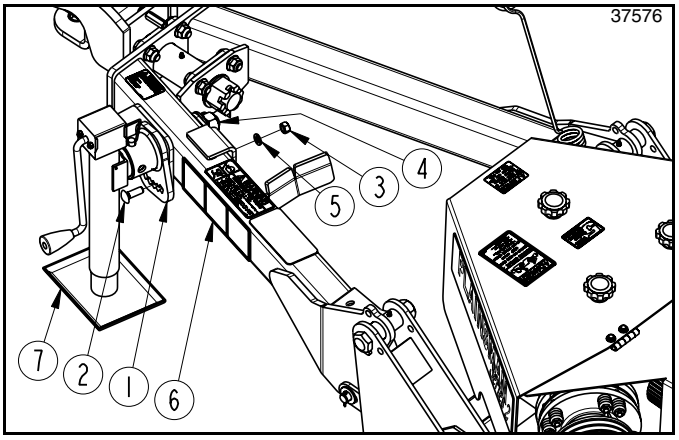


Hydraulic Lift Cylinder With Stroke Control Spacers
Figure 1-26



Unhook Rotary Cutter
Figure 1-27

24. Replace connecting pin/bolt (#1) as follows:
    a. **See Figure 1-11 on page 14:**
    If unhooking standard clevis, replace connecting pin (#1) in clevis (#9).
    b. **See Detail A in Figure 1-12 on page 15:**
    If unhooking LP Performance Hitch, insert hitch pin (#1) in horizontal hitch holes to support clevis level. Secure with hairpin cotter (#2)
    c. **See Figure 1-14 on page 16:**
    If unhooking bar-tite hitch, remove hitch (#10) from tractor tongue and reattach it to the cutter hitch (#9) with removed bolt (#1) and locknut (#2) Screw locknut on 4 or 5 full turns. Do not torque nut tight.



Park Jack Angle Alignment
Figure 2-1

Park Jack Angle Alignment

Refer to Figure 2-1:

The jack mount angle should be adjusted to position the park jack vertical while supporting the cutter hitch. This angle will vary depending on the number and size of stroke control spacers placed on the lift cylinder rod.

NOTE: If cutter is not hitched securely to a tractor, support blocks should be placed under the front skid shoes to support cutter while aligning the park jack vertically.

NOTE: Refer to decal (#6) and instructions below for jack alignment and torque value instructions.

1. With cutter hitched to a tractor, lower cutter to storage height.
2. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
3. Install park jack (#7). See **"Park Jack Assembly"** on page 13. Check jack angle. If jack is not vertical, proceed with step 3 below.
4. Remove hex nut (#3), lock washer (#5) and carriage bolt (#2).
5. Loosen 1" hex nut (#4). Do not remove.
6. Rotate jack mount (#1) to align jack as near vertical as possible.
7. Replace 1/2"-13 x 1 1/2" GR5 carriage bolt (#2) and secure with lock washer (#5) and hex nut (#3). Tighten hex nut to the correct torque.
8. Tighten 1" hex nut (#4) to 645 ft-lbs.
9. If moving cutter, skip to step 10. If unhooking cutter, see **"Unhook Rotary Cutter"** on page 22 for detailed instructions.
10. If cutter is to be moved, remove park jack (#7) from hitch frame and attach it to the left-hand wing storage base. Make sure base of park jack is level with or lower than the head, especially after the wings are folded up. See cover picture for correct positioning.

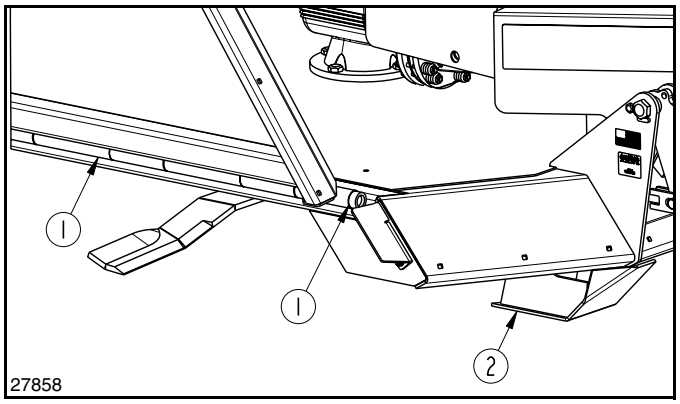
Leveling Center Deck & Wings

These adjustments should be made with your cutter hooked to the tractor operating the unit or to a tractor having the same drawbar height.

Center Deck Leveling

Refer to Figure 2-2 & Figure 2-3 on page 25:

1. With cutter attached to a tractor, disengage PTO, and park on a level, hard surface. Place tractor gear selector in park or set park brake.
2. Wait for blades to come to a complete stop and then fold wings up to transport position.
3. Shut tractor engine off and remove switch key before dismounting from tractor.
4. Set transport locks to keep wing decks from falling. See **"Transport Locks"** on page 30 for instructions.



Front Skid Position (Chain Guards Removed for Clarity)
Figure 2-2

5. Using hydraulic lift, adjust center deck height so that the front skids (#2) are 2 to 3 inches above ground.

NOTE: Loosening coupler nuts (#4) will lengthen leveling rods and lower front of cutter. Tightening coupler nuts (#4) will shorten leveling rods and raise front of cutter.

6. On both sides of the center deck are continuous hinges (#1). Measure distance from bottom of hinges to ground at the front and back. They should be equal distance off the ground at the back and 1" closer to the ground at the front than they are at the back.

   If continuous hinges are too high at the front:

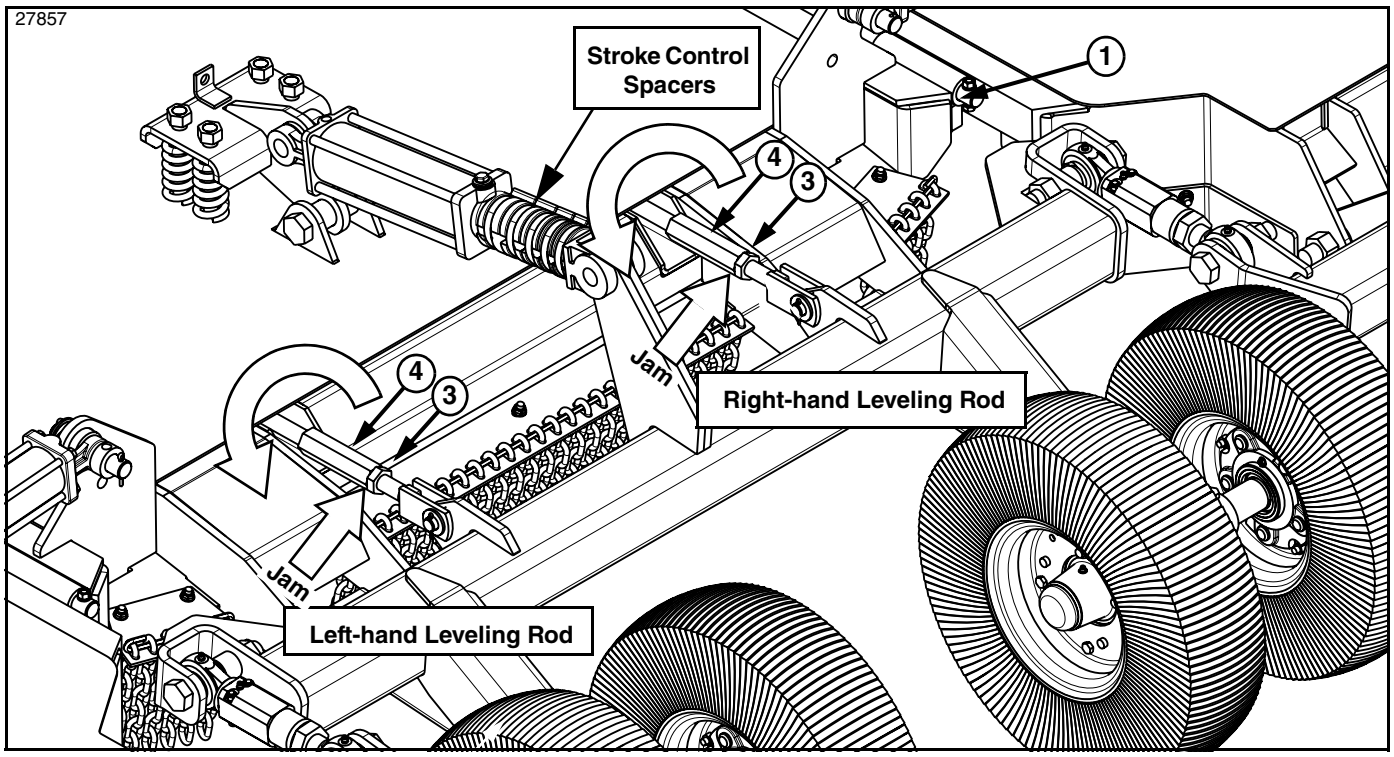
   a. Loosen jam nuts (#3).

   b. Loosen adjusting nuts (#4) an equal amount to lengthen both leveling rods until hinges (#1) are inclined from front to back by 1" with the front being closer to the ground than the back.

   If continuous hinges are too low at the front:

   a. Loosen jam nuts (#3) several turns.

   b. Tighten adjusting nuts (#4) an equal amount to shorten both leveling rods until hinges (#1) are inclined from front to back by 1" with the front being closer to the ground than the back.



Center Deck Leveling
Figure 2-3

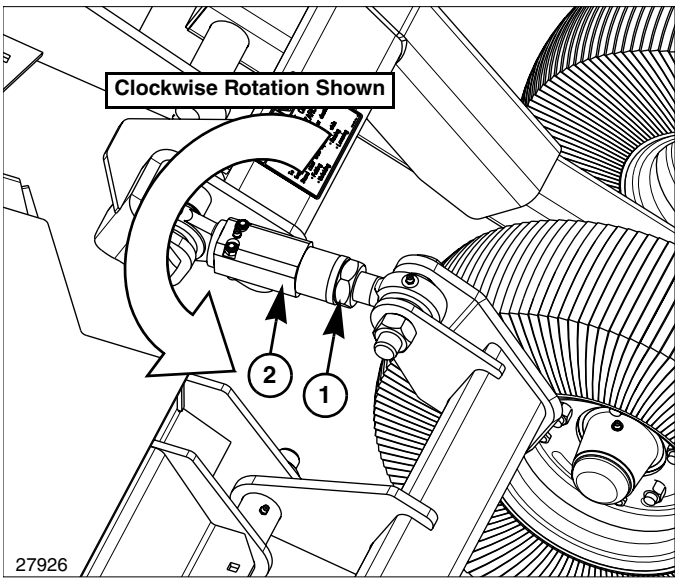
7. Be sure both sides are equal distance from ground to continuous hinges and that left and right leveling rods have equal tension. Re-tighten jam nut (#3).

Wing Deck Leveling

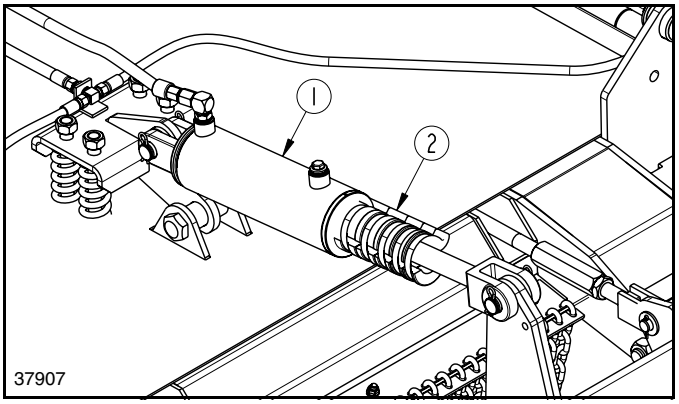
Refer to Figure 2-4:

Each wing section will need adjusting if wing top is not level with center deck top when wings are unfolded.

1. With tractor hydraulics, lower wings down. Refer to **"Field Set-up"** on page 31 for instructions on how to lower wings.
2. Pull cutter straight forward six to ten feet to allow outer wing wheels to properly align themselves.
3. Check wing tops to see if they are level with the top of the center deck. If the outer edge of either wing top is higher or lower than the center deck, then that wing should be leveled as follows:
   a. **If outer wing edge is higher** than the center deck, loosen jam nut (#1) & rotate turnbuckle (#2) clockwise to lower outer wing edge until wing is level. Tighten jam nut (#1) to the correct torque when level.
   b. **If outer wing edge is lower** than the center deck, loosen jam nut (#1) and rotate turnbuckle (#2) counterclockwise to raise outer wing edge until wing is level. Tighten jam nut (#1) to the correct torque when level.



Leveling Wing Decks
Figure 2-4



Cutting Height Adjustment
Figure 2-5

Cutting Height Adjustment

NOTE: Make all cutting height adjustments in the field using height of cut grass/material as a guide. Do not measure blade height above ground as the non-operating blade height will be different than the operating blade height.

Refer to Figure 2-5:

1. At the cutting site, unfold wings and raise center deck fully up with lift cylinder.
2. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
3. Remove all stroke control spacers (#2) from center hydraulic cylinder (#1) by spreading them apart at the break line. Store spacers in a location they can be retrieved.
4. Start tractor and engage blades. See **"Engage Blades"** on page 31 for detailed instructions.
5. Using tractor control lever, adjust cutter to the desired cutting height and then travel forward for approximately 20 to 50 feet.
6. Stop tractor, disengage PTO, place tractor gear selector in park or set park brake, shut off tractor, remove key, and wait for blades to come to a complete stop before dismounting from tractor.
7. Measure height of cut grass/material. This distance is the cutting height. If this height is acceptable, continue with step 8. If this height is unacceptable, repeat steps 4 thru 7 until desired cutting height is achieved.
8. Select required size and number of stroke control spacers (#2) that will fit on the center hydraulic cylinder rod. The following spacers are available.
   - Two 1" spacers
   - One 1 1/4" spacer
   - One 1 1/2" spacer
   - One 1 3/4" spacer

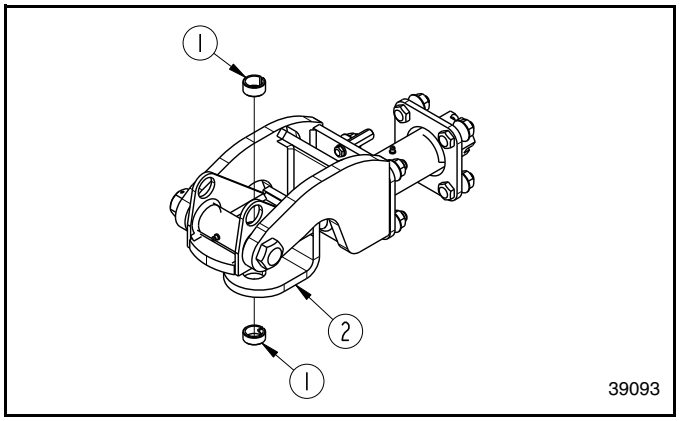
NOTE: Removing spacers lowers cutting height and adding spacers raises cutting height.

9. Return to tractor and raise Rotary Cutter up again.
10. Without lowering the cutter, shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
11. Install selected stroke control spacers on the center cylinder rod.
12. Return to the tractor and lower cutter against stroke control spacers.
13. Recheck cutting height using steps 4 thru 7 above. If needed, adjust size and quantity of stroke control spacers until desired cutting height is achieved.
14. Keep remaining spacers with tractor for field adjustments.

LP Performance Hitch Hole Size

Refer to Figure 2-6:

The LP Performance hitch is designed to receive 1" diameter hitch pins. To convert the hitch to receive 1 1/4" diameter hitch pins, knock out upper and lower bushings (#1) in clevis (#2).



LP Performance Hitch Hoe Size
Figure 2-6

Startup Checklist

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the Rotary Cutter. Therefore, it is absolutely essential that no one operates cutter without first having read, fully understood, and become totally familiar with the Operator's Manual. Make sure the operator has paid particular attention to:

- **Important Safety Information**, pages 1 to 9
- **Section 1: Assembly & Set-up,** page 11
- **Section 2: Adjustments**, page 24
- **Section 3: Operating Instructions**, page 27
- **Section 4: Options & Accessories**, page 33
- **Section 5: Maintenance & Lubrication**, page 38

Also make sure the operator has completed the Operating Checklist below before using the cutter.

Operating Checklist

✔	Check	Page
	Make sure all guards, and shields are in place and in good working condition. Refer to "Important Safety Information".	Page 1
	Follow hook-up and driveline installation instructions. Refer to "Section 1: Assembly & Set-up".	Page 14
	Make all required adjustments. Refer to "Section 2: Adjustments".	Page 24
	Preform all required maintenance. Refer to "Section 5: Maintenance & Lubrication".	Page 38
	Lubricate cutter and driveline as needed. Refer to "Lubrication Points".	Page 46
	Lubricate all gearboxes and replace oil plugs properly. Refer to Gearbox Lubrication.	Page 48
	Check cutter initially and periodically for loose bolts and pins. Refer to "Torque Values Chart".	Page 56

Safety Information

DANGER

Operate only tractors equipped with Roll-Over Protective Structure (ROPS) and seat belt. Fasten seat belt snugly and securely to help protect operator from being thrown, crushed, or severely injured in a rollover or from falling off the tractor and being ran over by the tractor and/or cutter.

DANGER

Never allow riders including children on the tractor or cutter. They can fall and be ran over, become entangled in rotating components, and/or pinched by moving components causing serious injury or death.

DANGER

Always disconnect main driveline from tractor PTO before servicing underside of cutter. PTO can be engaged if tractor is started causing cutter damage, bodily injury or death.

DANGER

Do not raise wings up past 45 degrees with PTO engaged and drivelines rotating. Objects can be thrown by rotating blades. Always keep people away from a cutter that is operating.

DANGER

Do not operate cutter with a bent or broken driveline. Such a driveline can break apart while rotating at high speeds causing serious injury or death. Always remove Rotary Cutter from service until damaged driveline is repaired or replaced.

DANGER

Keep others away from the cutter while it is operating. Rotary Cutters have the ability to discharge objects at high speeds causing serious injury or death. The use of front & rear safety guards is strongly recommended and should always be used when cutting along highways and in areas where bystanders are present. Stop blade rotation if bystanders are nearby.

DANGER

Do not operate cutter without both wings attached. Removing one wing will expose blades and increase risk of rollover. Removing both wings will expose blades on both sides. Exposed blades can result in serious injury and/or death.

DANGER

Do not engage tractor PTO while hooking-up and unhooking driveline or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.

DANGER

Never place hands or feet under the deck or attempt to make adjustments to the cutter with PTO engaged. Cutter blades rotating at high speeds cannot be seen and are located close to the deck housing. Body extremities can be cut off instantly.

DANGER

Do not operate on or travel across steep inclines where a tractor or cutter could roll-over resulting in serious injury or death. Consult your tractor's manual for acceptable inclines the tractor is capable of traveling across.

DANGER

Clear area to be cut of debris and other unforeseen removable objects before cutting. Mark any potential hazards that cannot be removed such as tree stumps, posts, large rocks, holes, and drop-offs with a visible flag.

DANGER

Tractor PTO shield and gearbox shaft shields must be secured in place when operating cutter to avoid injury or death from entanglement in driveline.

DANGER

Do not use cutting blades as a fan. Cutting blades are not properly designed or guarded for this use. Using cutter as a fan can result in injury and/or death.

WARNING

Always disengage PTO, place tractor in park or set park brake, shut tractor engine off, remove switch key, and wait for blades to stop before dismounting from tractor.

WARNING

Wait for blades to come to a complete stop before accessing blade bolts through blade bolt access hole.

WARNING

Do not use cutter to tow other equipment. Doing so can damage the cutter, cause serious bodily injury or death.

WARNING

Do not operate cutter with loose pins, bolts, or nuts. Loose hardware can result in a serious breakdown causing bodily injury or death.

WARNING

Do not operate cutter with a hitch or hitch pin that is excessively worn, has structural cracks, is bent, or is broken. The hitch and/or hitch pin can break apart separating cutter from tractor causing serious injury or death.

CAUTION

Do not exceed the rated cutting capacity. See Specifications & Capacities for specified cutting capacity. Using this cutter for any other type of work can damage drive components, cutter blades and deck components.

CAUTION

Do not over speed PTO or machine damage may result. Many tractors provide both 540 and 1,000 rpm PTO speeds. Check your tractor's manual to determine its capabilities.

- *RC series cutters are designed for 540 rpm rear PTO.*
- *RCM series cutters are designed for 1000 rpm rear PTO.*

IMPORTANT: Avoid catching hydraulic hoses on brush, posts, stumps, and other protrusions that could damage and/or break them.

IMPORTANT: Maintain correct PTO speed. Loss of PTO speed will allow blades to swing back and result in ragged, uneven cutting. Excessive speed will cause damage to the power train components.

IMPORTANT: If wing driveline profile is bent or twisted, disconnect that driveline from the wing gearbox before folding the wing up. This will protect both the wing and divider gearbox. Repair driveline before putting cutter back into service.

IMPORTANT: This Rotary Cutter is equipped with free swinging cutting blades to reduce shock loads. However, it is best to avoid striking obstacles for your safety and to protect the cutter from damage.

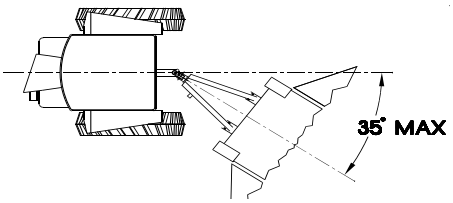
IMPORTANT: Watch while making tight turns to ensure that the rear tractor tires and lower 3-point arms do not make contact with cutter hitch, driveline or deck. Keep lower 3-point arms raised at all times when hitched to a pull-type cutter.

Avoid Extreme Turning Angles

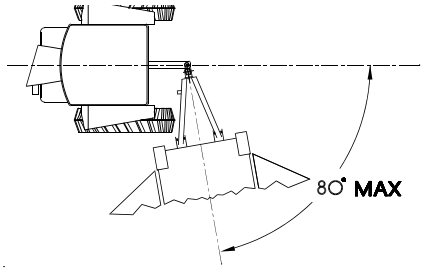
Refer to Figure 3-1 & Figure 3-2:

Plan your field cutting to minimize number of turns, especially extreme turning angles. Avoid tractor-to-cutter turning angles that exceeds driveline maximum turning angle. If the turn cannot be avoided, disengage tractor PTO and wait for the driveline to stop rotating before making the turn.

- **Standard Conventional Driveline:** Maximum turning angle = 35°.
- **Constant Velocity Driveline:** Maximum turning angle = 80°.



Conventional U-Joint Driveline
Figure 3-1



Constant Velocity (CV) Driveline
Figure 3-2

Tractor & Cutter Inspection

Make the following inspections with cutter attached to a tractor and cutter parked on a level surface, PTO disengaged, and cutter blades stopped.

1. Inspect tractor safety equipment to make sure it is in good working condition.
2. Inspect cutter safety equipment to make sure it is installed and in good working condition.
3. Check driveline to make certain it is securely connected to the tractor PTO shaft and cutter gearbox shaft. Also, make certain guards are in good working condition and in place.
4. Check driveline hanger. Make sure it is rotated down away from the driveline.
5. Remove 3-point lower arms or secure them in the raised position so they do not interfere with driveline, hoses, or hitch.
6. Check all hoses and wires to be sure that they will not pinch or come in contact with the folding wings and rotating drivelines.
7. Start tractor and carefully raise and lower implement to ensure tractor drawbar, tires, and other equipment on the tractor do not contact cutter or PTO driveline. See also **"Driveline Clearance Check"** on page 21
8. Raise center deck fully up.
9. Shut tractor down properly without lowering implement. Refer to **"Tractor Shutdown Procedure"** on page 13.
10. Place sturdy support blocks or jack stands under the four center deck corners.
11. Start tractor and lower center deck down onto the supports.
12. Shut tractor down properly before dismounting.
13. With cutter resting on solid supports, PTO disengaged, and blade rotation completely stopped:
    - Check for and remove foreign objects wrapped around blade spindles.
    - Check for nicked, bent, broken, and worn cutting blades. Replace or sharpen blades as required. Refer to **"Cutter Blade Maintenance"** on page 38.
14. Inspect hydraulic hoses for wear, damage, and hydraulic leaks. Before checking for leaks, read **"Avoid High Pressure Fluids Hazard"** on page 3. Replace damaged and worn hoses with genuine Land Pride parts.
15. Make repairs to cutter and tractor before continuing with **"Blade Operation Inspection"** on this page.

Blade Operation Inspection

DANGER

Tractor PTO shield and gearbox shaft shields must be secured in place when operating cutter to avoid injury or death from entanglement in driveline.

WARNING

Always disengage PTO, place tractor in park or set park brake, shut tractor engine off, remove switch key, and wait for blades to stop before dismounting from tractor.

IMPORTANT: Read all **"Safety Information"** starting on page 27 before operating the cutter.

IMPORTANT: Stop PTO immediately if vibration continues after a few revolutions during start-up and anytime vibration occurs thereafter.

IMPORTANT: Do not exceed cutter's rated PTO speed (540 or 1000 rpm). Excessive PTO speed will cause damage to the power train components.

1. Make sure cutter blades are not locked against each other. See **"Field Set-up"** on page 31.
2. Remove support blocks or jack stands and set transport locks for field operations. See **"Transport Locks"** on page 30
3. Lower cutter decks down until blades are about 2" off the ground.
4. Start tractor and set throttle speed just above idle. Use tractor's PTO soft start option if available. Slowly engage PTO to get blades rotating. (Also see **"Engage Blades"** instructions on page 31.)
5. Initial start-up vibration is normal and should stop after a few revolutions. Stop PTO rotation immediately if vibration continues.
6. Once cutter is running smoothly, increase throttle to full PTO speed. If cutter vibrates excessively for 3 seconds at full speed, immediately disengage PTO, shut tractor down, and remove switch key.
7. Block center deck up before working under cutter.
8. Check blades for a locked-up situation. Unlock blades if locked-up.
9. Check for other probable causes such as broken or bent blades, loose blades, loose gearbox mounting bolts, and bent driveline.
10. Taking proper precautions, make necessary repairs and adjustments.
11. Repeat steps 1 thru 10 above to make certain vibration problems are corrected before putting cutter back into service.

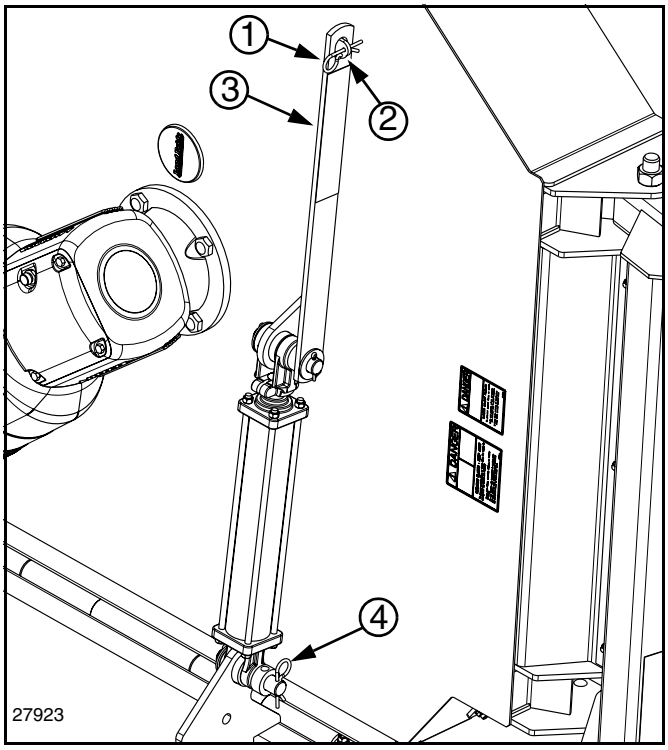
Transport Locks

IMPORTANT: Always disengage tractor's PTO & wait for blades to come to a complete stop before raising cutter wings to transport position. Wing drivelines, wing gearboxes, and splitter gearbox can be damaged if driveline is turning.

NOTE: The wings are controlled with two hydraulic lift cylinders. Be certain that the wing hydraulics are attached to the tractor and the hydraulic hoses are full of oil before proceeding.

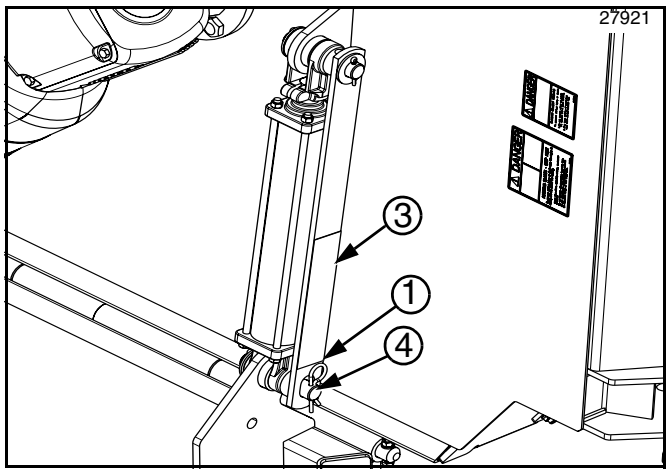
Cutter wings will need to be raised before transporting on a roadway, through narrow gate openings and when servicing the deck underside.

1. Disengage tractor PTO and wait for cutter blades to come to a complete stop before raising wings.
2. Rotate cutter wings fully up with hydraulics.
3. Place tractor gear selector in park, shut tractor engine off or set park brake, remove switch key, and dismount from tractor.



Transport Bar, Storage Position
Figure 3-3

4. **See Figure 3-3:** Remove hairpin clip (#1) from storage lug (#2).
5. **See Figure 3-4:** Rotate end of transport lock bar (#3) to cylinder pin (#4). Secure with hairpin clip (#1).
6. Repeat steps 4 and 5 for the other wing. Your cutter is now ready for transporting.



Transport Bar, Locked Position
Figure 3-4

Transporting

WARNING

Always raise wings and set transport locks before transporting from one work site to another and before traveling on public roadways. The wings can fall if not secured with transport locks causing a serious injury or death.

CAUTION

When traveling on public roads, use accessory lights, SMV sign, clean reflectors, and other adequate devices to warn operators in other vehicles of your presence. If cutter blocks visibility of SMV sign, relocate SMV sign so it is visible from the back at all times. Always comply with all federal, state, and local laws.

WARNING

Do not exceed maximum transport speed of 20 MPH with cutter attached. Travel below 20 MPH on rough terrain. The cutter can lose a tire or tires can break apart causing the operator to lose control of tractor and/or implement.

IMPORTANT: Make slow tight turns to the right and left to determine if and at what angle the rear tractor tires may come in contact with the deck and/or hitch.

1. Select a safe ground speed when transporting from one area to another. Maximum transport speed for the Rotary Cutter is 20 mph. **DO NOT EXCEED**.
2. Be sure to reduce tractor ground speed when turning and leave enough clearance so the cutter does not contact obstacles such as buildings, trees, or fences.
3. Always raise wings and set transport locks before traveling on public roadways.
4. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
5. Shift tractor to a lower gear when traveling over rough or hilly terrain.

Field Set-up

WARNING

The following operational procedures should be carried out by the tractor operator. Other persons should not be in the area. All cutter operations including field set-up should be stopped when other persons are in the vicinity.

IMPORTANT: Cutting should **not be** done in wet conditions. Wet material will build up on the deck underside creating need for additional horsepower, high wear, and poor discharge.

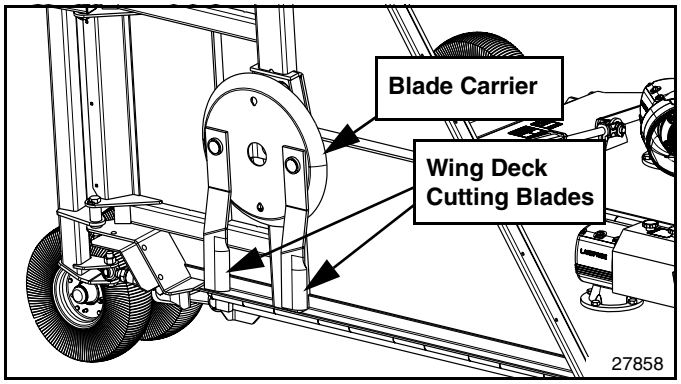
IMPORTANT: Cutting blades may become locked together (overlapped) when wings are raised for transport. Operating cutter in this condition will result in severe deck vibration. Inspect wings for locked blades prior to power-on operation. Use a pry bar or other tool to separate blades.

Inspect Field and Cutter Blades

1. Thoroughly inspect area to be cut for debris and unforeseen objects. Remove all potential hazards and mark any that cannot be removed.

Refer to Figure 3-5:

2. Inspect wing blade carriers and cutting blades for locked blades prior to lowering the wings. Use a pry bar or other tool to separate locked blades.



Wing Deck Blade Positioning
Figure 3-5

Lower Wing Down & Set Cutting Height

Refer to Figure 3-4 on page 30:

1. Raise both wings up to release any tension on transport lock bar as shown.
2. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
3. Remove hairpin cotters (#1) from both left and right wing cylinder pins (#4).

Refer to Figure 3-3 on page 30:

4. Rotate end of transport lock bar (#3) up to storage lug (#2) as shown. Secure with hairpin cotters (#1).
5. Start tractor and lower both wings down.
6. Adjust cutter to field cutting height. See **"Cutting Height Adjustment"** on page 26 for detailed instructions.

Set Wing Lift Lever In Float Position

IMPORTANT: The wing folding lever should be in float position to avoid damage to the wing hydraulic cylinder and axle while cutting on uneven terrain.

Use float position of your tractor's hydraulic system to provide automatic floating of wings for varying terrain conditions. This will ensure wing gauge wheels are in continuous contact with the ground at all times.

Select Gear Range

Optimum ground speed depends on density of material being cut, horsepower rating of tractor, and (in some cases) terrain. Always operate tractor at cutter's full-rated PTO speed in a gear range that allows the cutter to make a smooth cut without lugging the tractor down, usually between 2 to 5 mph. Loss of PTO speed will allow blades to hinge back and result in ragged, uneven cutting.

Engage Blades

IMPORTANT: Cutter blades can lock-up against each other during start-up and shut-down especially if tractor's PTO engagement is "INSTANT ON" and "INSTANT OFF". Follow Blade Engagement and Blade Disengagement instructions to help eliminate blade lock up.

1. Select a gear range that will allow cutter to make a smooth cut without lugging tractor down. See **"Select Gear Range"** above for detailed instructions.
2. With wings lowered, increase throttle to a speed just enough to get the cutter started without stalling tractor while slowly engaging PTO. Use tractor's PTO soft start option if available.
3. Ensure all power shafts are rotating and cutter is not vibrating excessively after ramping up to full PTO speed for at least 3 seconds. If excessive vibration continues after 3 seconds at full PTO speed, disengage PTO immediately, shut down tractor, and remove switch key. Wait for blades to come to a complete stop before dismounting tractor.
4. Investigate cause if cutter was shut down due to excessive vibration. See **"Blade Operation Inspection"** on page 29 for detailed instructions.
5. If cutter was not shut down, commence forward cutting operation at full PTO operating speed. Make a new gear selection if tractor is lugging down or if cutter is making a rough cut.
6. Periodically, disengage PTO, stop tractor, place gear selector in park or set park brake, turn off tractor, remove switch key and wait for blades to stop rotating before dismounting tractor.

7. Dismount tractor and check for objects wrapped around blade spindles. Block deck up before removing objects.
8. Frequently inspect cutter for loose bolts and nuts. Tighten all loose hardware as indicated in the **"Torque Values Chart"** on page 56.

Disengage Blades

1. Slowly decrease throttle speed until engine idle speed is reached.
2. Disengage PTO.
3. Place tractor in park or set park brake, shut tractor engine off, remove switch key, and wait for blades to come to a complete stop before dismounting from tractor.

General Operating Instructions

It is important that you familiarize yourself with the Operator's Manual, complete the Operator's Checklist, properly attach the cutter to your tractor, make leveling adjustments, and preset your cutting height before beginning a running operational safety check on your Land Pride RC4015 or RCM4015 Series 2 Rotary Cutter.

It's now time to do a running operational safety check. It is important that at any time during this safety check you detect a malfunction in either the cutter or tractor that you immediately shut the tractor off, remove the key, and make necessary repairs and/or adjustments before continuing on.

Before starting the tractor, make sure the park brake is engaged, PTO is disengaged, and cutter is resting on the ground with both wings down. Start the tractor and set engine throttle speed at a low idle. Raise cutter with tractor's rear hydraulic lift control lever to transport position making sure that the PTO shaft does not bind and does not contact the cutter frame. Lower cutter to the ground and at a low engine speed engage PTO. If everything is running smoothly at a low idle, slowly raise the cutter to transport height checking for bind or chatter in the driveline. Lower cutter to the ground and increase tractor's engine rpm until it reaches the cutter's full PTO operating speed which will be either 540 or 1000 rpm. If everything is still running smoothly, once more raise the cutter to transport height to check for driveline bind or chatter. Lower cutter to the ground, return engine to a low idle, and disengage the PTO. Make a tight turn to ensure that the rear tractor tires are not coming in contact with the hitch or deck. Also, be sure tractor 3-point arms are raised and will not contact main driveline.

You should now be ready to transport to your cutting site at a safe ground speed. On roadways, transport in such a manner that faster moving vehicles can easily see you and pass you safely. Reduce your speed when traveling over rough and hilly terrain. Avoid quick or sharp steering corrections. Take extra care to ensure that the mower doesn't come into contact with obstacles such as trees, buildings, or fences. Use optional light kit and appropriate reflective devices to provide adequate warning to pedestrians and other vehicle operators when traveling on public roads and in the dark of night. Comply with all local, state and federal laws.

It is important that you inspect the area where you will be cutting and clear it of safety hazards and foreign objects either before or after you arrive at the cutting site. Never assume the area is clear. Cut only in areas which you are familiar with and are free of debris and unseen objects. Extremely tall grass should be cut twice to detect potential hazards. In the event you do strike an object, stop the cutter and tractor immediately to inspect and make necessary repairs to the cutter before resuming operation. It really pays to inspect a new area and to develop a safe plan before cutting.

You will need to maintain either 540 or 1000 rpm PTO speed and 2 to 5 mph ground speed to produce a clean cut. Make a tractor gear and range selection that will enable you to maintain these speed combinations. Generally the quality of cut is better at lower ground speeds. Dense ground cover will create the need to slow down even more. In certain conditions tractor tires will roll grass down resulting in an uneven cut when the grass fails to rebound. Should this happen you may try reversing the direction of cut and/or double cut to achieve the desired finish. Avoid very low cutting heights especially on extremely uneven terrain. Always cut downward on slopes and avoid crossing the face of steep slopes. Avoid sharp drops and cross diagonally through dips to prevent hanging up the tractor and cutter. Slow down in turns and avoid sharp turns if at all possible. Remember to look back often.

Now that you're prepared and well briefed you may begin cutting. Begin cutting by doing the following:

- Reduce tractor's engine rpm.
- Make sure cutter wings are on the ground and in cutting position.
- Engage PTO, raise engine rpm to the appropriate PTO speed, and begin mowing.

Operators of models with a conventional main driveline must plan ahead and choose a cutting pattern that allows for wider turns. Try increasing or decreasing ground speed to determine the effect on quality of cut. With a little practice you will be pleased with what you and your Land Pride 15' Smooth Top Cutter can do.

When you are done mowing, need to take a break, or just need to make a few adjustments to the cutter, remember to always do the following:

- Reduce tractor's engine rpm and disengage PTO.
- Stop on level ground, place gear selector in park or set park brake, turn off engine, remove switch key, and stay on the tractor until cutter blades have come to a complete stop.

Safety Guard

DANGER

Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety guards is strongly recommended when cutting. Specifically, double row chain guards should be used along highways and in areas where people may be present.

DANGER

Safety shields will not stop all objects. Therefore, Land Pride recommends using extreme caution when cutting in public areas. Stop blade rotation if bystanders come within several hundred feet.

Land Pride offers three types of safety guards to best suit your application: rubber skirt guards, single row chain guards, and double row chain guards.

- Rubber skirt guards are designed for light duty applications.
- Single row chain guards are constructed with a single row of hanging chain links. They can withstand harsher applications than rubber skirts.
- Double row chain guards are constructed with two staggered rows of hanging chain links. The second row provides an additional barrier for stopping thrown objects.

Rubber Guards

330-482A	Front Rubber Guards
330-494A	Rear Rubber Guards

Single Chain Guards

330-481A	Front Single Row Chain Guards
330-493A	Rear Single Row Chain Guards

Double Chain Guards

330-483A	Front Dual Chain Guards
330-495A	Rear Dual Chain Guards

Tire & Axle Options

Land Pride offers three different tires and three axle arrangements to best suit your application:

- Laminated tires: They are constructed of laminated layers of solid rubber that will never go flat.
- New foam filled tires: They are built tough to withstand the rugged use a cutter receives, provides a smoother ride when transporting and won't go flat.
- Used aircraft tires: They are built tough to withstand the rugged use a cutter receives and to provide a smoother ride when transporting.
- 4 - Wheel axle arrangement: Two tires on transport axle and one on each wing axle.
- 6 - Wheel axle arrangement: Four tires on transport axle and one on each wing axle.
- 8 - Wheel axle arrangement: Four tires on transport axle and two on each wing axle.

Hitch Options

The cutter is factory supplied with the standard clevis hitch. Other optional hitches are available. See **"Hitch Types"** on page 12 for complete description of optional hitches.

330-498A	Standard Clevis Hitch
330-333A	Bar-Tite Hitch (Optional)
330-335A	Ball Hitch (Optional)
330-501A	Pintle Hitch (Optional)
334-045A	LP Performance Hitch (Optional)

Mechanical Wing Lift

330-295A Mechanical Winch

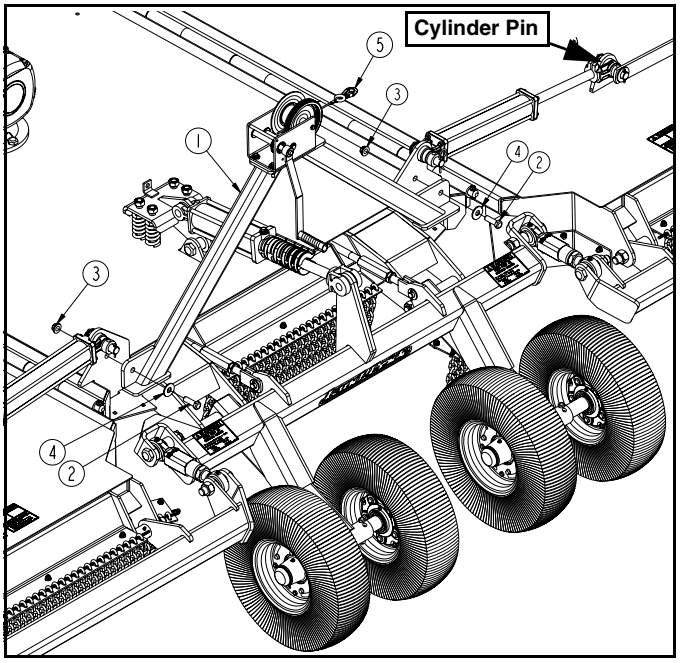
Refer to Figure 4-1:

An optional manual wing lift kit is available for raising the wing to transport position when the hydraulic system is not working or when the towing vehicle is not equipped with the proper hydraulic connections.

Pull hook (#5) with cable out. Attach cable to wing deck by routing the cable around the cylinder pin between the clevis brackets and clipping the hook back to the cable. The cylinder rod end will need to be disconnected from the wing if the rod will not retract.

Installation Instructions

Attach mechanical winch mounting frame (#1) to the center deck in the location shown with 5/8"-11 x 2" GR5 cap screws (#2), flat washers (#4), and hex flange lock nuts (#3). Tighten nuts to the correct torque.



Mechanical Winch
Figure 4-1

Operating Instructions

DANGER

Make sure no one is in the area where the deck will be raised. The cable could come loose or break and drop the wing suddenly causing serious bodily injury or death.

DANGER

If a cylinder fitting was loosened to mechanically raise the wing deck up, be sure to also lower the wing deck with the mechanical winch. Do not use the cylinder to lower the deck. It will have an excess amount of air and will drop the deck suddenly.and can cause serious bodily injury or death.

IMPORTANT: If wing driveline profile is bent or twisted, disconnect that driveline from the wing gearbox before folding the wing up. This will protect both the wing and divider gearbox. Repair driveline before putting cutter back into service.

1. Pull cable hook with cable out past the gearbox.
2. Attach cable to wing deck by routing cable around the wing gearbox base and clipping the hook back to the cable or by hooking the cable to the wing deck side panel. Make certain the cable is secured and will not slip or come loose before raising the deck up.
3. Turn mechanical winch handle to raise deck. If cylinder rod will not retract while raising the wing up, loosen hydraulic fitting on the rod side of the cylinder to allow intake of air while raising the wing.
4. Secure wing deck in the raised position with cylinder transport lock. See **"Transport Locks"** instructions on page 30.
5. Retighten hydraulic fitting if loosened.
6. Lower wing deck as follows:

   If hydraulic fitting was not loosened:

   a. Unhook cable and reel cable up.

   b. Connect hydraulic hose to a tractor and lower wing deck with tractor control lever.

   If hydraulic fitting was loosened:

   a. Loosen hydraulic fitting at the cylinder to allow intake air to escape while lowering the wing deck.

   b. Remove transport lock and lower wing deck with mechanical winch.

   c. Retighten hydraulic fitting and connect all hydraulic hoses to a tractor.

   d. Purge hydraulic system of air. See **"Purge Hydraulic System"** on page 21.

Hydraulic Accessories

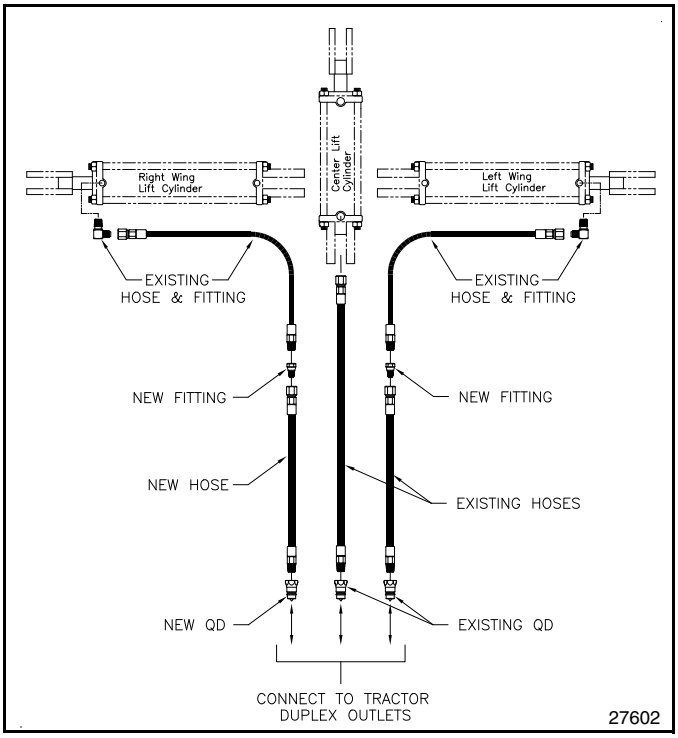
Land Pride offers two different kits for raising the deck wings independently to clear small obstacles in the field without maneuvering around them.

Hydraulic Wing Control Kit

318-316A HYDRAULIC WING CONTROL KIT

Refer to Figure 4-2:

This kit is for tractors with three duplex outlets. It consist of two adapter fittings, one hose, and one quick disconnect coupling. If your tractor is equipped with only two duplex outlets, an optional control kit is available from your local Land Pride dealer. See **"Selector Control Valve Kit"** below.



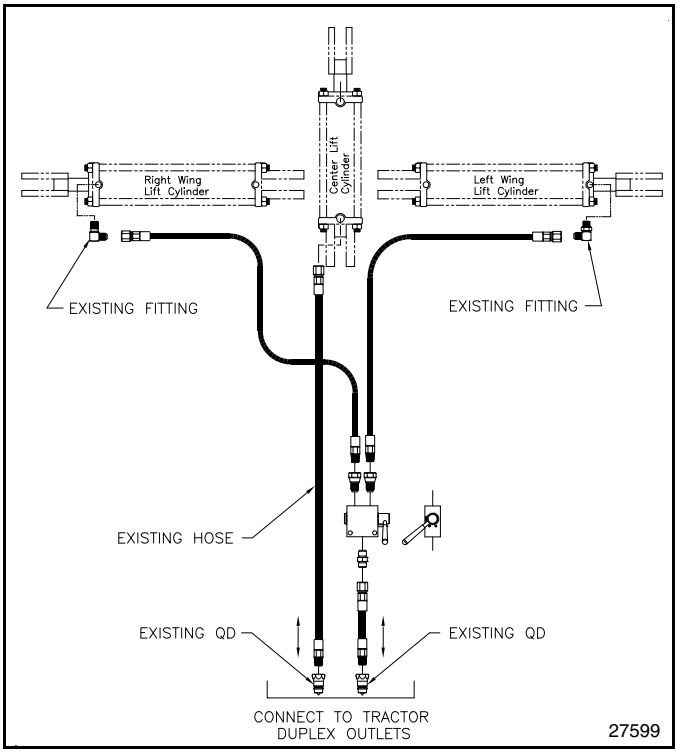
Hydraulic Wing Control Kit
Figure 4-2

Selector Control Valve Kit

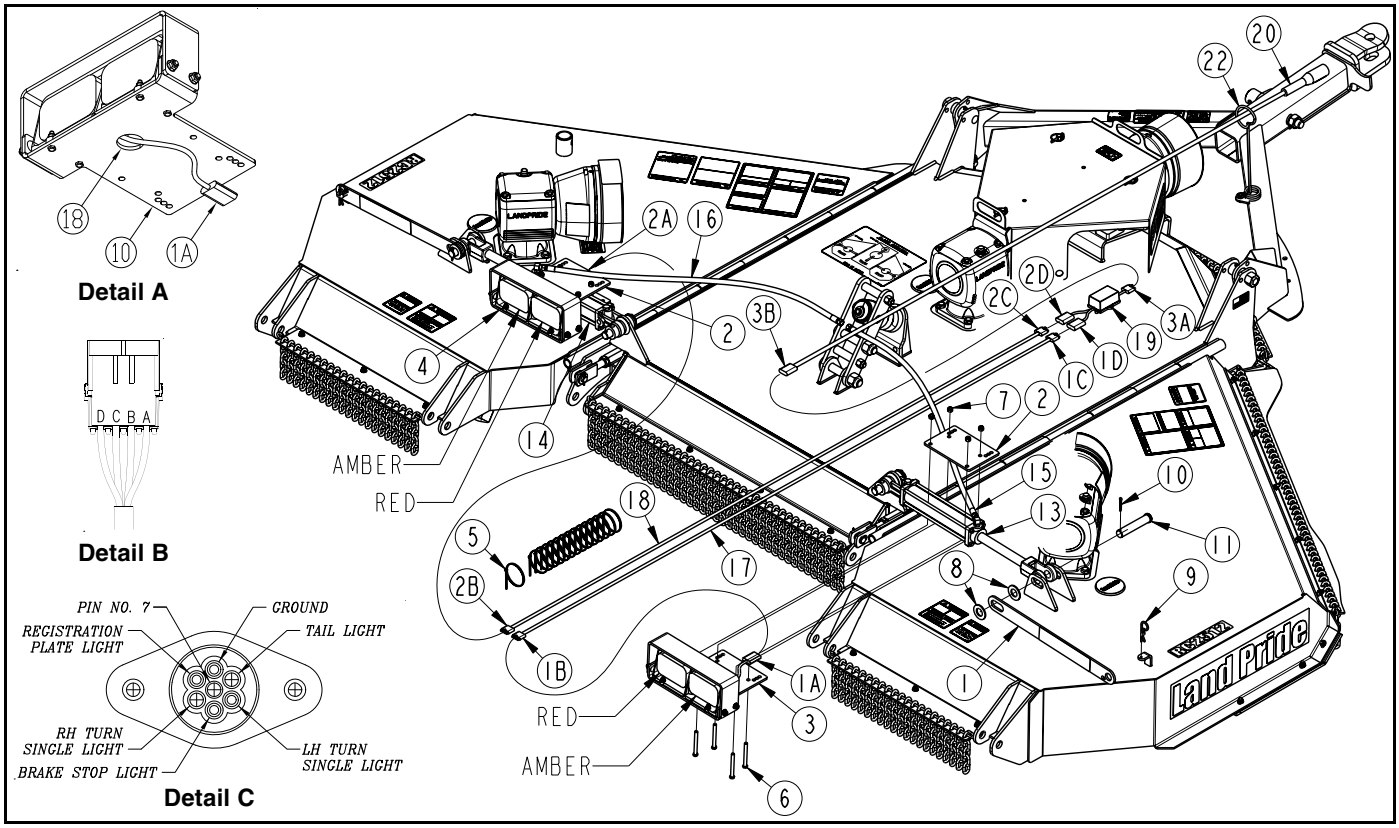
312-316A SELECTOR CONTROL VALVE KIT

Refer to Figure 4-3:

This kit is for tractors needing only one additional duplex outlet. It converts one of the tractor's duplex outlets into two duplex outlets with a control valve. A selector lever on the control valve selects which wing cylinder is operational with the tractor hydraulic control lever. It attaches to the existing elbow fittings at the wing cylinders and uses the existing quick disconnect couplings supplied with the cutter to connect to one of the tractor's duplex outlets.



Selector Control Valve Kit
Figure 4-3



Light Kit (Shown on RC3615 Deck)
Figure 4-4

Light Kit Option (LED)

331-498A Folding Cutter Light Kit 2.5"

Refer to Figure 4-4:

The lead wiring harness (#20) is equipped with a 7-way round pin connector. Make sure your tractor is equipped with the 7-pin electrical outlet shown in **Detail C** before purchasing this product.

1. Lower cutter center deck and wing decks down until unit is resting on the lift cylinder stops and both wings are on the ground.
2. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 13.
3. Move hydraulic control lever back and forth several times to release all hydraulic pressure in hydraulic lines to the cutter.
4. On the right-hand wing, remove cotter pin (#10), flat washers (#8), transport bar (#1), and clevis pin (#11).

NOTE: Hydraulic hoses (#15 & #16) must be located above mounting clamps (#2) as shown.

5. If not done, thread connector (#1A) through hole (#21) as shown in **Detail A**.

NOTE: Amber lights are located to the outside and red lights are located to the inside as shown.

6. Attach right-hand light assembly (#3) under hydraulic cylinder (#13) with mounting clamp (#2) on top.
7. **Nuts (#7) must be on top.** Secure unit to cylinder with 3/8"-16 x 4" GR5 bolts (#6) and lock nuts (#7). Draw lock nuts up snug, do not tighten at this time.
8. Slide light assembly (#3) and mounting clamp (#2) as far as possible toward the rod end of hydraulic cylinder (#13).
9. Tighten each lock nut (#7) one-half turn in a criss-cross pattern until all nuts are torqued tight.
10. Replace clevis pin (#11), flat washers (#8), transport bar (#1), and cotter pin (#10), Bend one or more legs of cotter pin to keep pin (#11) from falling out.
11. Repeat steps 4 thru 10 for the left-hand light assembly (#4).

NOTE: Right-hand wire harness (#17) has a red wire showing at both ends. Left-hand harness (#18) has a yellow wire showing at both ends.

NOTE: See Detail B: Pins in the connectors are labeled A, B, C, & D. Match yellow and red wires with same pin letters when attaching wire harness to light assemblies (#3 & #4) & enhance module (#19).

NOTE: Route wire harnesses (#17, #18, & #20) alongside hydraulic hoses. Make sure harnesses will not become pinched as the deck is raised and lowered and wings are folded up and down.

12. Red wires in connectors (#1A & #1B) are attached to pin “D” shown in Detail B. Plug connectors (#1A & #1B) together.
13. Yellow wires in connectors (#2A & #2B) are attached to pin “B” Shown in Detail B. Plug connectors (#2A & #2B) together.
14. Route wire harnesses (#17 & #18) to enhance module (#19). Plug connectors at the enhance module to harness (#17 & #18) as follows:
    a. Red wires in connectors (#1C & #1D) are attached to pin “B” as shown in Detail B. Plug connectors (#1C & #1D) together.
    b. Yellow wires in connectors (#2C & #2D) are attached to pin “C” shown in Detail B. Plug connectors (#2C & #2D) together.
15. Attach connector (#3A) to connector (#3B) on lead wire harness (#20).
16. Route lead wire harness through spring hose loop and connect to the tractor’s 7-way round pin receiver.
17. Start tractor and operate lights to verify hook-up is operating properly:
    a. Turn on head lights to verify red lights illuminate.
    b. Operate turn signal to turn right. Amber light on the right side should blink on and off.
    c. Operate turn signal to turn left. Amber light on the left should blink on and off.
18. If the lights did not operate properly, recheck hook-up of wire harnesses (#17 & #18). Make necessary changes to the harnesses and repeat step 17 above.
19. Recheck wire harness routing to make sure wires will not be pinched as wing decks are folded and unfolded and while raising and lowering cutter height.
20. Add cable ties (#5) to wire harnesses (#17, #18, & #20) as needed to secure them in place.

General Maintenance Information

Proper servicing and adjustments are key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly downtime and repair.

The parts on your Rotary Cutter have been specially designed and should only be replaced with genuine Land Pride parts. Do not alter the cutter in a way which will adversely affect its performance.

Check all bolts and pins after using the cutter for several hours and on a regular basis thereafter to ensure they are tight and secured. Replace worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride dealer.

DANGER

Perform maintenance only on a cutter that is not running. Disengage PTO, place tractor in park or set park brake, shut tractor engine off, remove switch key, and wait for blades to come to a complete stop before dismounting tractor to perform maintenance.

WARNING

Frequently check all hardware to make certain it is tight and not broken or missing. Such hardware can cause the cutter to not perform properly and may lead to breakage that can cause bodily injury or death.

WARNING

Replace worn, damaged, or missing parts with genuine Land Pride parts only. Replacing parts with other brands can cause the equipment to not perform properly and may lead to breakage that can cause bodily injury or death.

WARNING

Do not operate cutter with loose pins, bolts, or nuts. Loose hardware can result in a serious breakdown causing bodily injury or death.

CAUTION

Do not alter the Rotary Cutter in a way which will adversely affect its performance or safety. Doing so can damage the cutter, cause personal injury and void the warranty.

Tractor Maintenance

One of the most important things you can do to prevent hydraulic system problems is to ensure your tractor's hydraulic reservoir remains free of dirt and other contaminations.

Use a clean cloth to wipe hose ends before attaching them to your tractor. Replace your tractor's hydraulic filter element at the prescribed intervals. These simple maintenances will go a long way to prevent occurrence of control valve and hydraulic cylinder problems.

Cutter Blade Maintenance

DANGER

Always disconnect main driveline from tractor PTO before servicing underside of cutter. PTO can be engaged if tractor is started causing cutter damage, bodily injury or death.

DANGER

Always secure cutter deck in the up position with solid supports before servicing underside of cutter. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the cutter instantly even when power to the hydraulics is shut off.

WARNING

Do not operate cutter with blades that are bent, out-of-balance, excessively worn, excessively nicked, or with blade bolts that are excessively worn. Such blades can break loose from the cutter at high speeds causing serious injury or death.

WARNING

Wait for blades to come to a complete stop before accessing blade bolts through blade bolt access hole.

CAUTION

ALWAYS wear gloves and eye protection while inspecting, removing, sharpening, and replacing cutter blades.

IMPORTANT: Replace cutting blades with genuine Land Pride blades only. Blades must be replaced in mating pairs. Not replacing both blades will result in an out-of-balance condition that will contribute to premature bearing breakdown on the spindle hub and create structural cracks in the cutter housing.

Always inspect cutting blades before each use. Make certain they are properly installed and in good working condition. Replace any blade that is damaged, worn, bent, or excessively nicked. Never try to straighten a bent blade! Small nicks can be ground out when sharpening. Refer to Figure 5-2 on page 39 when ordering Land Pride replacement blade components.

Remove cutting blades and sharpen or replace as follows:

1. Place tractor gear selector in park and/or set brakes, shut engine off and remove ignition key.
2. Disconnect main driveline from tractor PTO and secure cutter deck in the up position with solid supports before servicing underside of cutter.

Refer to Figure 5-2:

3. Remove rubber plug (#5). Rotate blade carrier (#4) until blade bolt (#1) aligns with access hole (A).
4. Unscrew locknut (#3) to remove cutter blade (#6). Blade bolt (#1) is keyed and will not turn freely.
5. Both blades should be sharpened at the same angle as the original cutting edge and must be replaced or re-ground at the same time to maintain proper balance in the cutting unit. The following precautions should be taken when sharpening blades:
   a. Do not remove more material than necessary.
   b. Do not heat and pound out a cutting edge.
   c. Do not grind blades to a razor edge. Leave a blunt cutting edge approximately 1/16" thick.
   d. Always grind cutting edge so end of blade remains square to cutting edge and not rounded.
   e. Do not sharpen back side of blade.
   f. Both blades should weigh the same with not more than 1 1/2 oz. difference. Unbalanced blades will cause excessive vibration which can damage gearbox bearings and create structural cracks.

Refer to Figure 5-1:

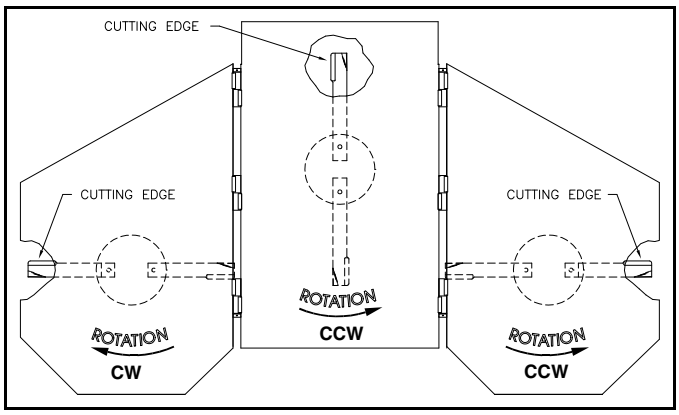
6. Carefully check cutting edges of blades in relation to blade carrier rotation to ensure correct blade placement. Cutter blades must be installed with cutting edge leading in rotation**.**

Refer to Figure 5-2:

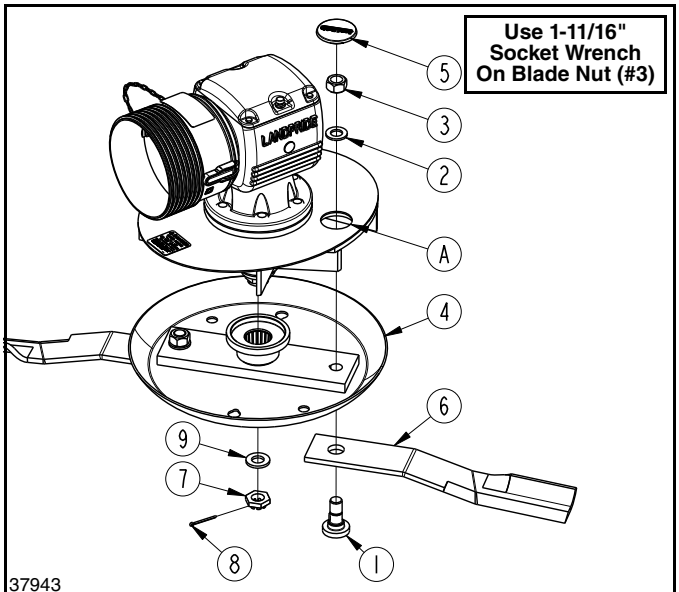
IMPORTANT: Examine blade bolts and their flat washers for excessive wear and replace if worn.

IMPORTANT: Locknuts can lose their ability to lock properly once removed. Always use a new locknut when installing blades.

7. Insert blade bolt (#1) through blade (#6), dishpan (#4), and flat washer (#2). Secure blade with a **new locknut (#3)** and torque to 450 ft-lbs.
8. If replacing dishpan (#4), nut (#7) on gearbox output shaft should be torqued to 450 ft-lbs. minimum and secured with cotter pin (#8) with both legs bent opposite directions around the nut.
9. Replace rubber plug (#5).
10. Reconnect main driveline to tractor PTO shaft.



Blade Rotation
Figure 5-1



Land Pride Cutter Blade Parts

Item	Part No.	Part Description
	318-586A	BLADE BOLT KIT (Includes items 1, 2, & 3 below)
1	802-277C	BLADE BOLT 1 1/8-12 x 3 7/16 WITH KEY
2	804-147C	WASHER FLAT 1 HARD ASTMF436
3	803-170C	NUT HEX TOP LOCK 1 1/8-12 PLATE
4	326-430H	DISHPAN, 15" CTR WITH HEAVY HUB
5	840-273C	PLUG LP 3" ID RUBBER
6	820-112C	CUTTER BLADE 1/2 x 4 x 25 CW (LH WING)
6	820-137C	CUTTER BLADE 1/2 x 4 x 25 CCW (RH WING)
6	820-138C	CUTTER BLADE 1/2 x 4 x 31 CCW (CTR)

Cutter Blade Assembly
Figure 5-2

Drivelines With Slip Clutches

WARNING

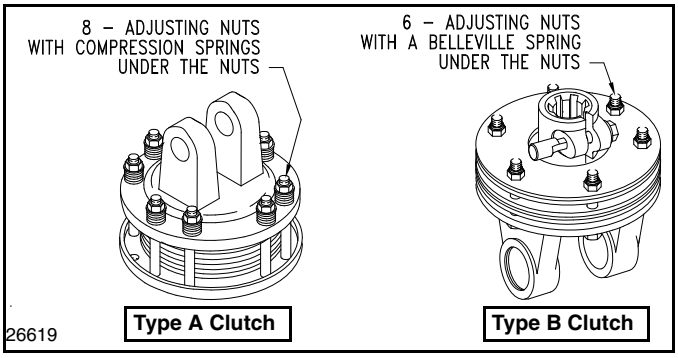
Always disengage PTO, place tractor in park or set park brake, shut tractor engine off, remove switch key, and wait for blades to come to a complete stop before dismounting from tractor to work on or around revolving components.

CAUTION

Slip clutches that have been in use or have been slipped for only two or three seconds during run-in may be too hot to touch. Allow a hot clutch to cool before working on it.

IMPORTANT: Prior to initial operation and after long periods of inactivity, slip friction disks to remove oxidation and moisture. Moisture allows disks to slip easily. Oxidation can prevent disk from slipping causing driveline damage. This damage is NOT covered under the warranty!

Friction clutches must be capable of slippage during operation to protect gearboxes, drivelines, and other drive train parts. Friction clutches should be "run-in" prior to initial operation and after periods of inactivity to remove any oxidation from the friction surfaces. Repeat "run-in" at the beginning of each season and when moisture seizes the inner friction plates.



Clutch Types
Figure 5-3

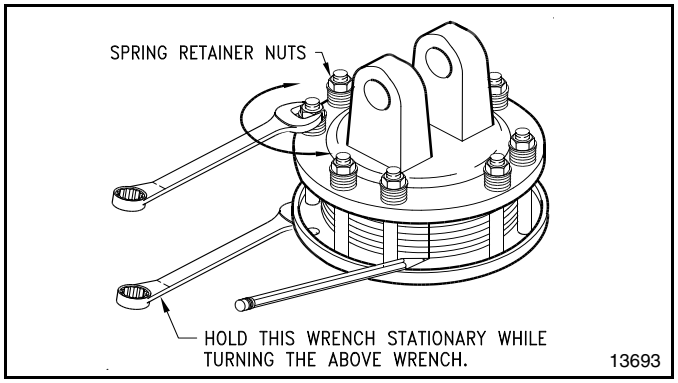
Refer to Figure 5-3 to determine which friction clutch your cutter has. Follow "run-in" instructions for your specific clutch type. Refer to this page for **"Type A Clutches"** and page 42 for **"Type B Clutches"**.

Type A Clutches

Clutch Run-In

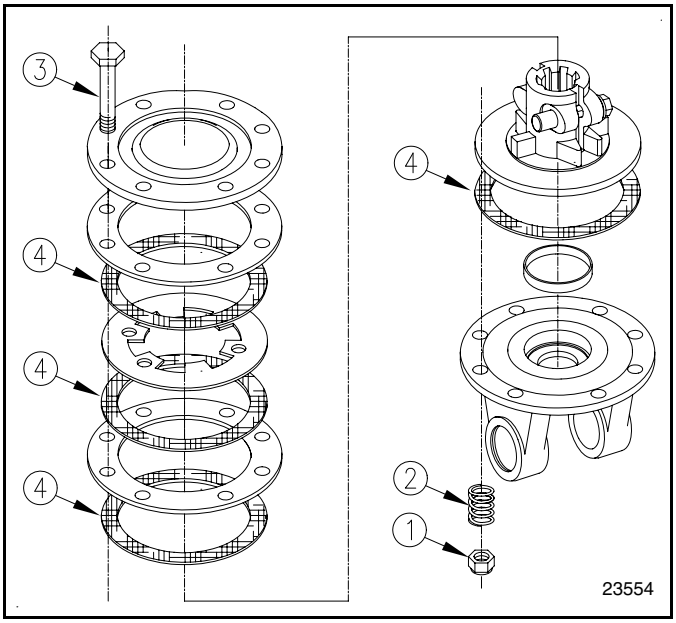
Refer to Figure 5-4:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.
2. Carefully loosen each of the 8 spring retainer nuts by exactly 2 revolutions. It will be necessary to hold hex end of retainer bolt in order to **count the exact number of revolutions**.
3. Make sure the area is clear of all bystanders and machine is safe to operate.

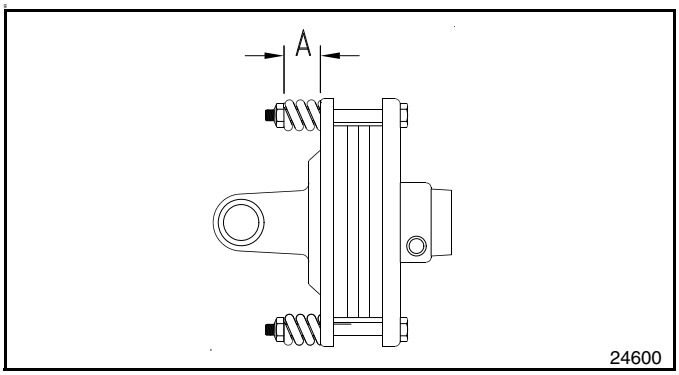


Type A Clutch Run-In
Figure 5-4

4. Start tractor and engage PTO drive for 2-3 seconds to permit slippage of the clutch surfaces. Disengage PTO, then re-engage a second time for 2-3 seconds. Disengage PTO, shut off tractor, and remove key. Wait for all components to stop before dismounting from tractor.
5. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See **"Clutch Disassembly, Inspection & Assembly"** on page 41 below.
6. Tighten each of the 8 spring retainer nuts on the clutch housing exactly 2 revolutions to restore clutch to original setting pressure.
7. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
8. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage. See Figure 5-6 on page 41 to adjust spring length.



Type A Clutch Assembly
Figure 5-5



Driveline No.	Driveline Location	PTO Speed	Cat No.	A (inches) Spring Height
826-818C	Center	540/1000	5	1.32"
826-811C	Wing	540/1000	4	1.32"
826-812C	Wing	540/1000	5	1.32"

Type A Clutch Adjustment
Figure 5-6

Clutch Disassembly, Inspection & Assembly

Refer to Figure 5-5:

If clutch run-in procedure above indicated that one or more friction disks did not slip, then the clutch must be disassembled to separate the friction disks.

Disassembly

IMPORTANT: Not all clutches are assembled the same with the same number of components. Be sure to keep track of order and orientation of your clutch components during disassembly.

Disassembly of clutch is simply a matter of first removing spring retainer nuts (#1), springs (#2), and bolts (#3) from the assembly. Each friction disk (#4) must then be separated from the metal surface adjacent to it.

Inspection

Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement.The original friction disk thickness is 1/8" (3.2mm) and should be replaced if thickness falls below 3/64" (1.1mm). If clutches have been slipped to the point of “smoking”, the friction disks may be damaged and should be replaced. Heat build-up may also affect the yoke joints.

Assembly

Reassemble each friction disk (#4) next to the metal plate it was separated from. Install bolts (#3) through end plates and intermediate plates as shown. Place springs (#2) over the bolts and secure with nuts (#1).

Refer to Figure 5-6:

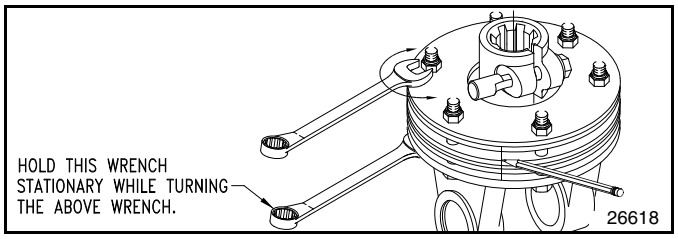
Progressively tighten each spring retainer bolt until correct spring height “A” is reached.

Type B Clutches

Clutch Run-In

Refer to Figure 5-7:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.
2. Carefully loosen each of the 6 nuts by exactly 1 revolution. It will be necessary to hold hex end of retainer bolt in order to **count the exact number of revolutions**.



Type B Clutch Run-In
Figure 5-7

3. Make sure the area is clear of all bystanders and machine is safe to operate.
4. Start tractor and engage PTO drive at idle for 2-3 seconds to permit slippage of friction plates. Disengage PTO, shut off tractor, and remove key. Wait for all components to come to a complete stop before dismounting from tractor.
5. Inspect clutch to ensure that the scribed markings made on the clutch plates and friction disc have changed positions. If any two marks are still aligned, then the clutch did not slip as it should. Skip to step 8 if all clutch plates slipped.
6. If the friction clutch did not slip, loosen the nuts one more revolution. Make sure the nuts have full thread engagement on the bolt and then repeat steps 4 - 5.
7. A clutch that does not slip must be disassembled to separate the friction disk plates. See **"Clutch Disassembly, Inspection & Assembly"** below.
8. Tighten each of the nuts on the clutch back to their original location to restore clutch pressure.
9. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
10. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage.

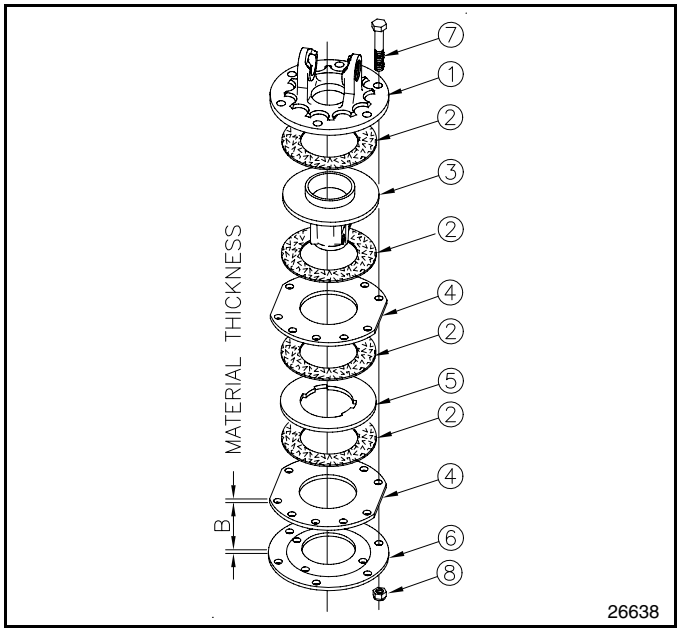
Clutch Disassembly, Inspection & Assembly

Refer to Figure 5-8:

The clutch must be disassembled into its separate friction disks if clutch run-in procedure indicated that one or more friction disks did not slip. See disassembly instructions.

Disassembly

IMPORTANT: Do not remove nuts (#8) from bolts (#7) until after Belleville spring (#6) is relaxed and not pressing against any of the six nuts (#8).



Type B 4-Plate Clutch Assembly
Figure 5-8

1. Unscrew nuts (#8) equal amounts until all belleville spring tension is removed. Do not remove nuts until tension against all nuts has been removed.
2. Remove nuts (#8) and bolts (#7).
3. Separate all friction disks (#2) from plates (#4 & #5), hub (#3) and yoke flange (#1).

Inspection

Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement.The original friction disk thickness is 1/8" (3.2mm) and should be replaced if thickness falls below 3/64" (1.1mm). If clutches have been slipped to the point of "smoking", the friction disks may be damaged and should be replaced. Heat build-up may also affect the yoke joints.

Assembly

1. Reassemble each friction disk (#2) next to the metal plate it was separated from.
2. Install bolts (#7) through end plates and intermediate plates as shown and secure with nuts (#8).

IMPORTANT: Measurement "B" is an approximate distance. Variations in spring force and friction materials may cause some differences in torque values. Tightening nuts (#8) one revolution will compress 4-plate clutch 1.75mm (.069").

3. Tighten belleville spring (#6) until spring is tight against drive plate (#4) & then back nuts (#8) up 3 and 1/6 revolutions, "B" = 5.5 mm (0.217"). If a higher torque is needed, then tighten nuts another 1/6 of a revolution, Do not set gap "B" smaller than 5 mm (0.197").

Skid Shoe Maintenance

CAUTION

Excessive wear on skid shoes may cause inadequate operation of cutter and create a safety hazard.

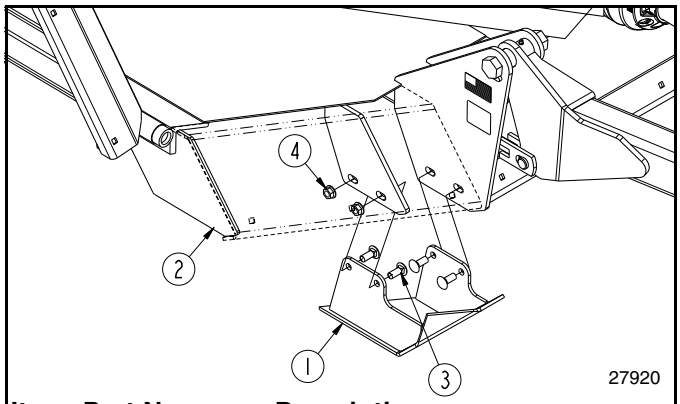
Two skid shoes are mounted on the center section and one skid shoe mounted on each wing section. Check all skid shoes for wear and replace if necessary. Order only genuine Land Pride parts from your local Land Pride dealer.

Center Skid Shoes

Refer to Figure 5-9:

Replace center skid shoes as follows:

1. Remove 1/2"-13 hex whiz nuts (#4), 1/2" -13 x 1 1/4" GR5 carriage bolts (#3), and right-hand center skid shoe (#1) from the center deck frame (#2) as shown.
2. Attach new skid shoe (#1) to cutter with existing 1/2" hex bolts (#3), and secure with existing 1/2" hex whiz nuts (#4). Tighten bolts to the correct torque.
3. Repeat steps 1 & 2 for left-hand center skid shoe.



Item	Part No.	Description
1	318-211H	CENTER SKID SHOE (RIGHT HAND)
1	318-212H	CENTER SKID SHOE (LEFT HAND)

Center Skid Shoe
Figure 5-9

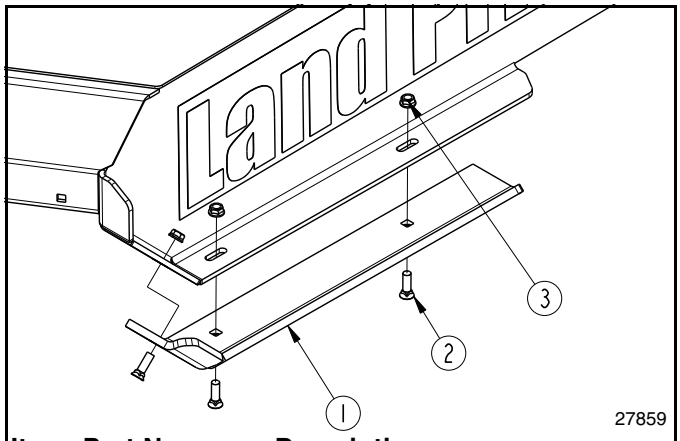
Wing Skid Shoes

Refer to Figure 5-10:

IMPORTANT: Excessive wear on skid shoes can weaken cutter side panels and cause damage that will require extensive repairs. Always replace skid shoes at the first sign of wearing thin.

Replace wing skid shoes as follows:

1. Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2), and left-hand skid shoe (#1) as shown.
2. Plow bolts (#2) should be checked for wear and replaced if necessary.
3. Attach new left-hand skid shoe (#1) to cutter with existing 3/8" plow bolts (#3) and secure with 3/8" hex whiz nuts. Tighten bolts to the correct torque.
4. Repeat for the right-hand wing.



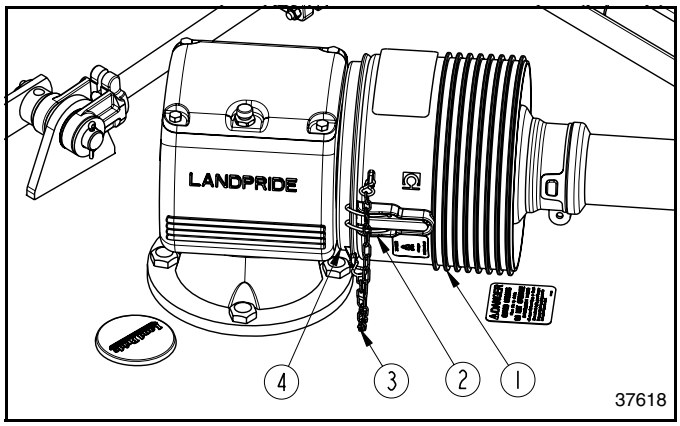
Item	Part No.	Description
1	331-792H	BEVELED SKID SHOE RH
1	331-793H	BEVELED SKID SHOE LH
2	802-466C	PLOW BOLT, 3/8" - 16 x 1 1/4" GR5

Wing Skid shoe
Figure 5-10

Spindle Gearbox Shaft Guard

Refer to Figure 1-11:

1. To remove shaft guard (#1) at the spindle gearbox, unsnap latches (#2) on both sides of guard (#1) and slide shaft guard over driveline to expose driveline yoke. Do not unhook safety chain (#3).
2. When servicing of driveline yoke is completed, return shaft guard to its original position and secure with latches (#2).
3. Check safety chain (#3). Make sure it is latched to shaft guard mounting plate (#4) and shaft guard (#1).



Gearbox Shaft Guard
Figure 5-11

Tire Maintenance

WARNING

Tire changing can be dangerous and should be performed by trained personnel using correct tools and equipment. When removing and installing wheels, use wheel handling equipment adequate for the weight involved.

WARNING

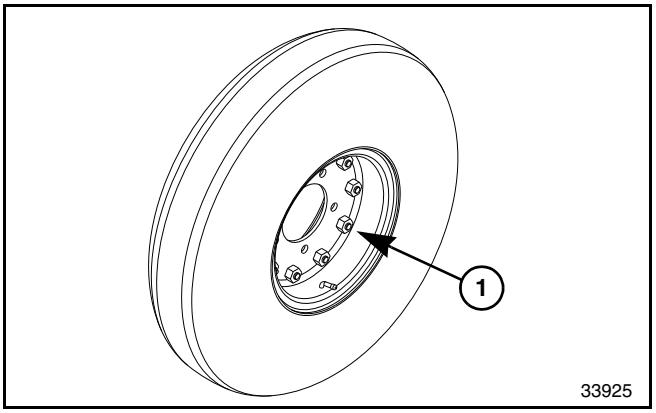
Always release all air pressure in air-filled airplane tires before removing hardware bolting their split rims together. Not doing so can cause the split rims to blow apart instantly and could result in serious injury or death.

WARNING

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available. Do not overinflate tires.

WARNING

Do not weld on or heat a rim. If a tire is mounted to the rim, air pressure inside the tire can increase enough to cause an explosion. High heat can also weaken and/or warp the rim, damage the tire, and destroy foam filling inside a tire.



Air Filled Airplane Tires with Split Rims
Figure 5-12

1. Check tires for low air pressure, missing nuts, missing lug bolts, wear, separated rubber, and bent, broken, or cracked wheel rims.
2. Inflate air filled tires to the proper pressure. Refer to **"Tire Inflation Chart"** on page 56.

Refer to Figure 5-12:

3. Replace wheel rims and tires as needed with genuine Land Pride parts. Do not loosen split rim hardware (#1) until all air pressure in the tire has been removed.

Long-term Storage

Clean, inspect, service, and make necessary repairs to the cutter when parking it for long periods and when parking it at the end of a working season. This will help ensure the cuter is ready for field use the next time you hook-up to it.

DANGER

Always disconnect main driveline from tractor PTO before servicing underside of cutter. PTO can be engaged if tractor is started causing cutter damage, bodily injury or death.

DANGER

Always secure cutter deck in the up position with solid supports before servicing underside of cutter. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the cutter instantly even when power to the hydraulics is shut off.

1. Clean off any dirt and grease that may have accumulated on the cutter and moving parts. Scrape off compacted dirt from the bottom of deck and then wash surface thoroughly with a garden hose. A coating of oil may also be applied to the lower deck area to minimize oxidation.
2. Check blades and blade bolts for wear and replace if necessary. See **"Cutter Blade Maintenance"** on page 38.
3. Inspect for loose, damaged, or worn parts and adjust or replace as needed.
4. Repaint parts where paint is worn or scratched to prevent rust. Ask your Land Pride dealer for aerosol touch-up paint. Paint is also available in touch-up bottles with brush, quarts, and gallon sizes by adding TU, QT, or GL to the end of the aerosol part number.

Land Pride Aerosol Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE AEROSOL SPRAY CAN
821-002C	PAINT LP BLACK AEROSOL SPRAY CAN
821-054C	PAINT MEDIUM RED AEROSOL SPRAY CAN
821-058C	PAINT GREEN AEROSOL SPRAY CAN
821-066C	PAINT ORANGE AEROSOL SPRAY CAN

5. Replace all damaged or missing guarding & decals.
6. Lubricate as noted in **"Lubrication Points"** starting on page 46.
7. Store cutter on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer cutter life.
8. Follow **"Unhook Rotary Cutter"** instructions on page 22 when disconnecting tractor from cutter.

Ordering Replacement Parts

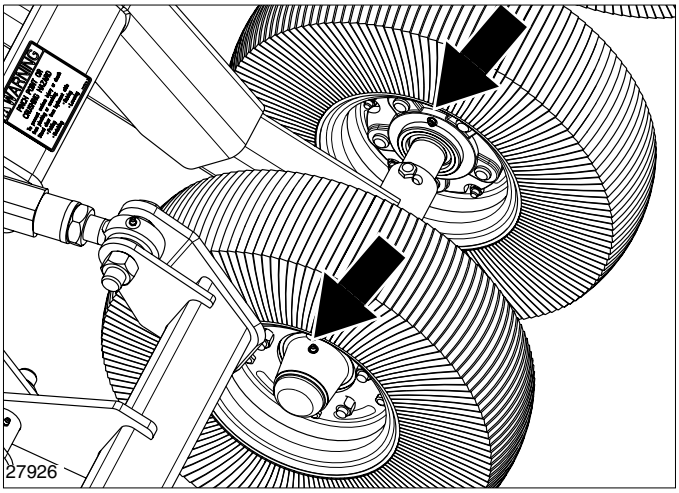
Land Pride offers equipment in factory standard beige color with black highlights. Equipment in special colors may be purchased in Green, Red, and Orange. Because of the variety of colors available, special attention must be given to the part number to prevent ordering the wrong replacement part. A suffix number corresponding to one of the colors below must be added at the end of Land Pride's part number when ordering a replacement part with that color. Parts ordered without a suffix number will be supplied in factory standard colors.

81 . . . . . Green	**82 . . . . . Orange**
83 . . . . . Red	**85 . . . . . Black**

For example, if you are ordering a replacement part with part number 555-555C and the existing part is red, then add the suffix 83 to the end of the number to make the part number read 555-555C83.

Lubrication Points

Lubrication Legend	Multi-purpose spray lube	Multi-purpose grease lube	Multi-purpose oil lube	50 hrs	Intervals in hours at which lubrication is required



50 Hours Repack Annually

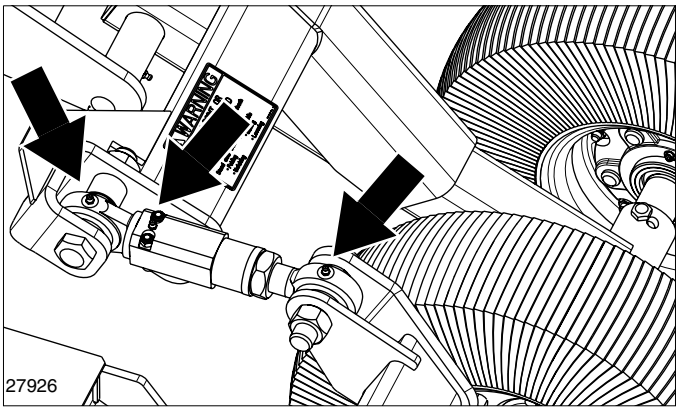
Axle Hub Bearing

1-zerk per wheel (zerk can be on either side)

Type of Lubrication: Multi-Purpose Grease

Grease wheel bearings every 50 hours.
Quantity = 2 pumps

Repack wheel bearings annually



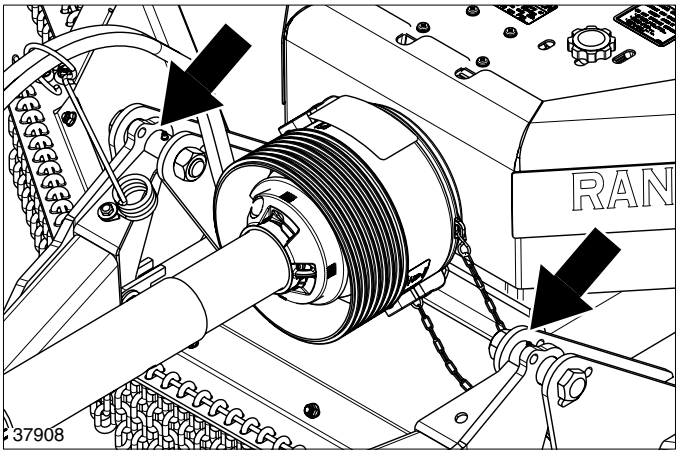
50 Hours

Adjustable Turnbuckle

4 - zerks (2 per turnbuckle)

Type of Lubrication: Multi-Purpose Grease

Quantity = As required



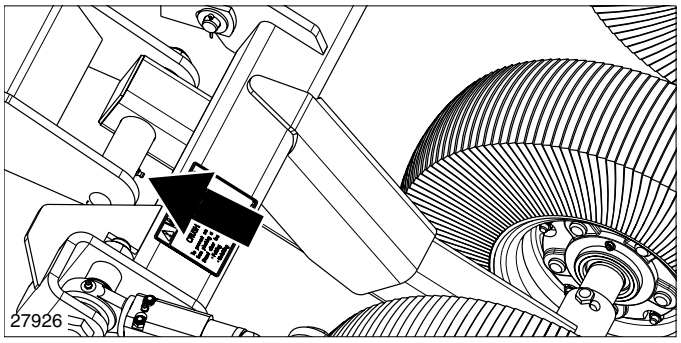
50 Hours

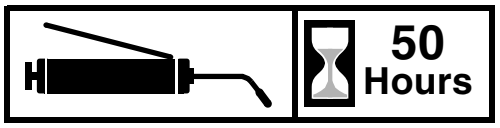
Hitch Frame

2-zerks

Type of Lubrication: Multi-Purpose Grease

Quantity = As required

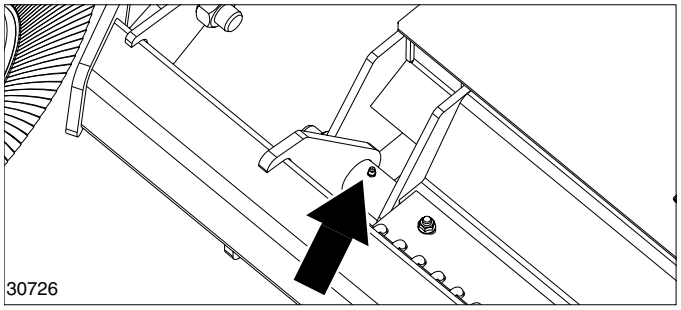


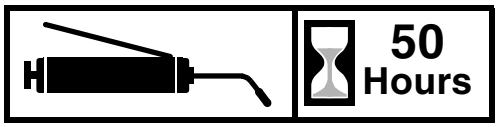


Center Deck Axle Pivot

3-zerks

Type of Lubrication: Multi-purpose Grease

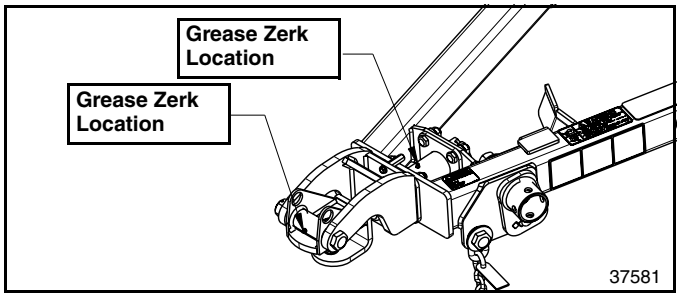


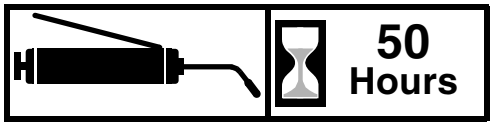


Wing Deck Axle Pivot

4-zerks (2-zerks per wing axle)

Type of Lubrication: Multi-purpose Grease



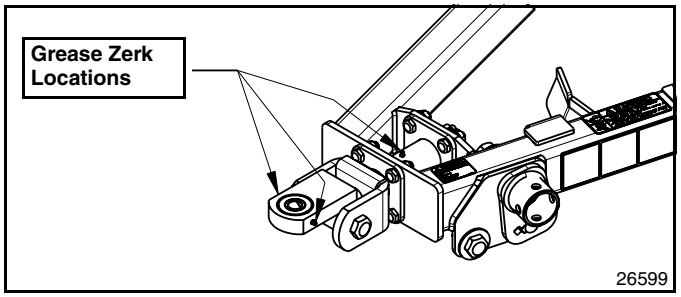


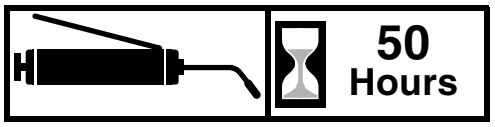
LP Performance Hitch (Optional)

2 - zerks

Type of Lubrication: Multi-purpose Grease

Quantity = As required



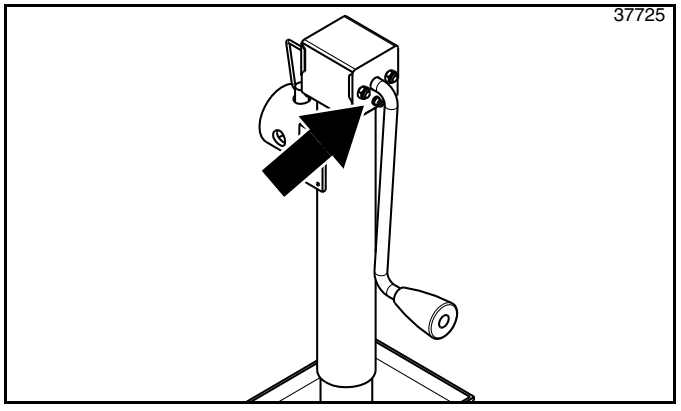


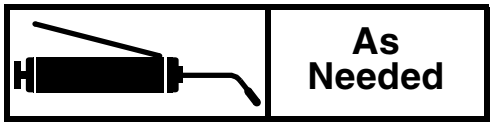
Bar-Tite Hitch (Optional)

3-zerks

Type of Lubrication: Multi-purpose Grease

Quantity = As required





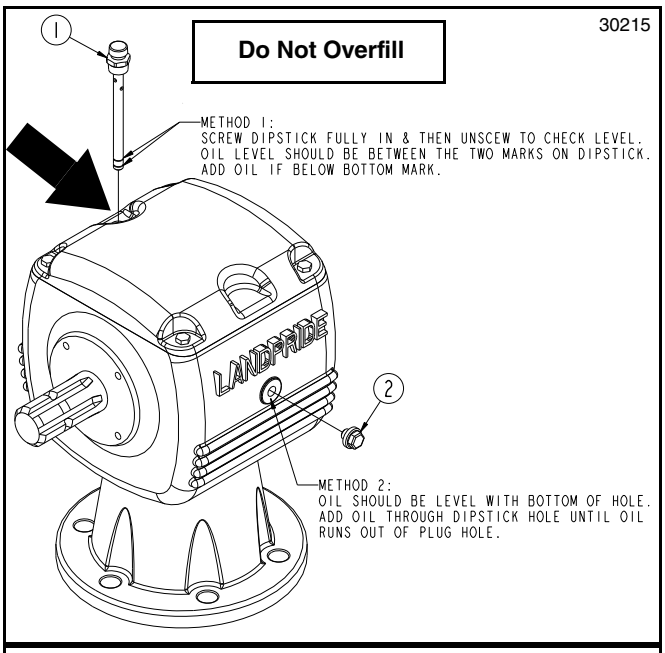
Park Jack

1 - zerk

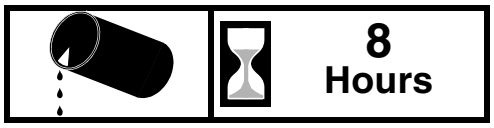
Type of Lubrication: Multi-purpose Grease

Quantity = As required

Frequency = As needed and when unhooking for longterm storage.



NOTE: Use a suction or siphon pump to drain gearbox of oil when there is not an oil drain plug.



Gearbox

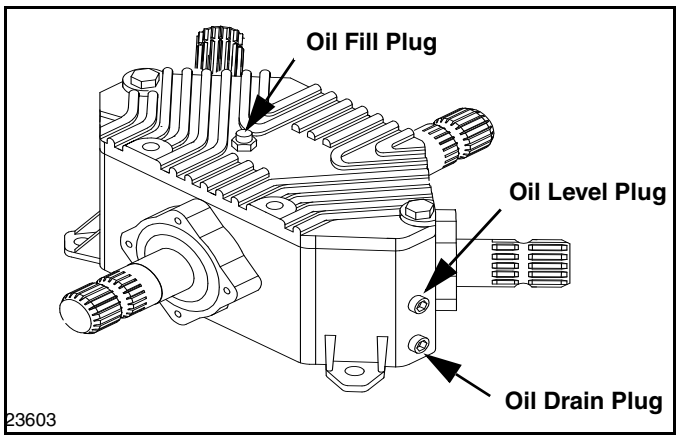
IMPORTANT: Do not overfill gearbox with oil! Oil will expand when hot! Make sure cutter is level and oil is cool before checking oil level.

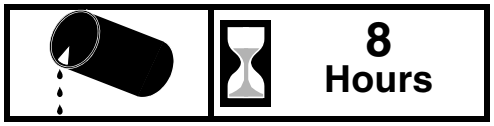
Method 1: Unscrew top vented dipstick (#1). Wipe oil from dipstick and screw dipstick in without tightening. Unscrew dipstick and check oil on dipstick. If below bottom level mark, add recommended gear lube through dipstick hole until oil reaches top mark on dipstick. Reinstall vented dipstick and tighten.

Method 2: Remove side oil plug (#2). If oil is below bottom of plug hole, add recommended gear lube through top dipstick hole until oil flows out of side plug hole. Reinstall and tighten side oil plug (#2) and vented dipstick (#1).

Type of Lubrication: 80-90W EP Gear Lube

Quantity = Fill until oil reaches top mark on dipstick or begins to flow out side plug hole in gearbox**.**





Divider Box

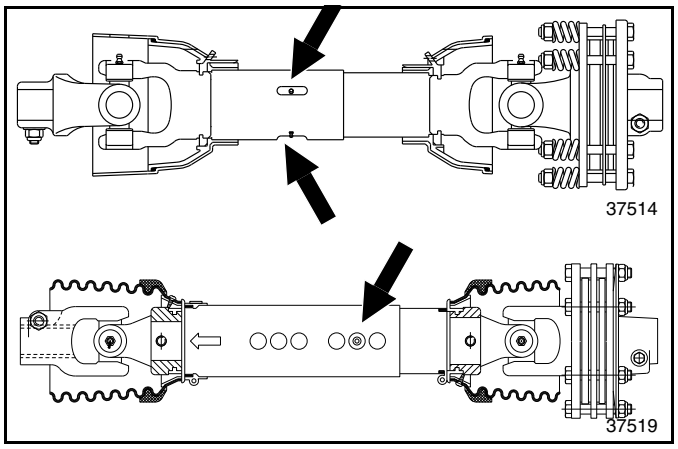
IMPORTANT: Do not overfill gearbox with oil! Oil will expand when hot! Make sure cutter is level and oil is cool before checking oil level.

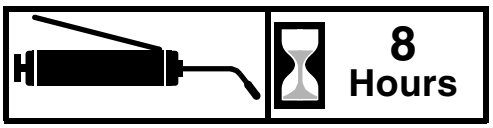
If oil has been removed from the gearbox, refill gearbox to level plug, allow time for air to bleed up from the lower cavity, and then recheck.

Instructions: Remove oil level plug. If oil is below bottom of plug hole, add recommended gear lube through oil fill/vent plug hole until oil flows out of oil level plug hole. Reinstall and tighten oil level plug and oil fill/vent plug.

Type of Lubrication: 80-90W EP

Quantity = Fill until oil begins to flow out oil level plug hole in gearbox.

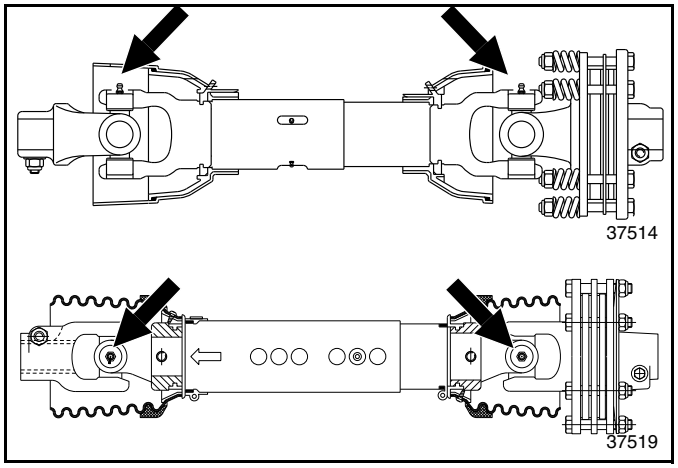




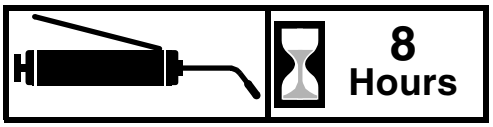
Wing Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

Quantity = Coat Generously

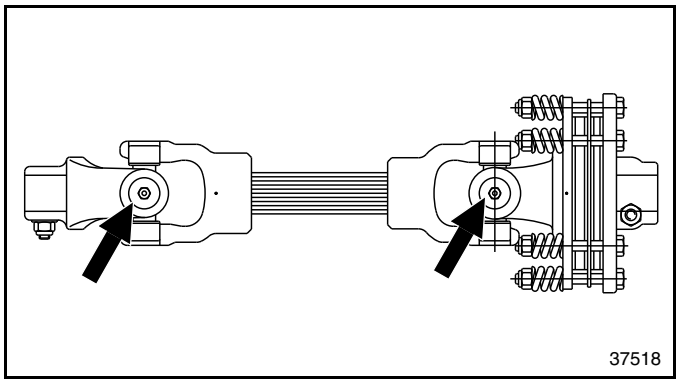


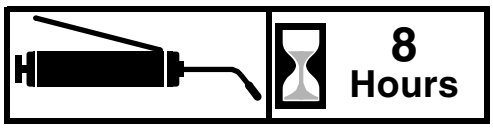
Drivelines with external profile tube grease point



Wing Driveline Joints

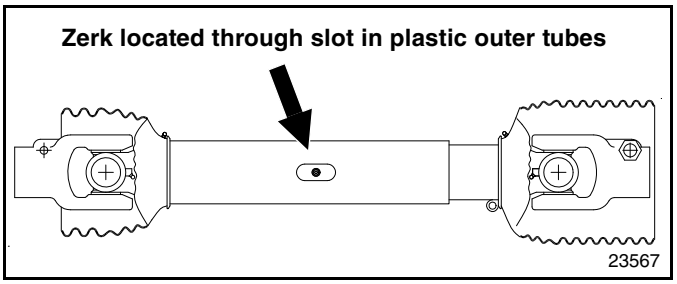
Type of Lubrication: Multi-purpose Grease

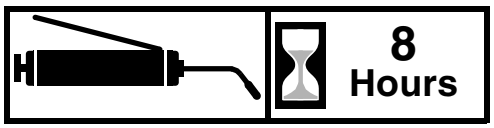




Intermediate Driveline Joints

Type of Lubrication: Multi-purpose Grease

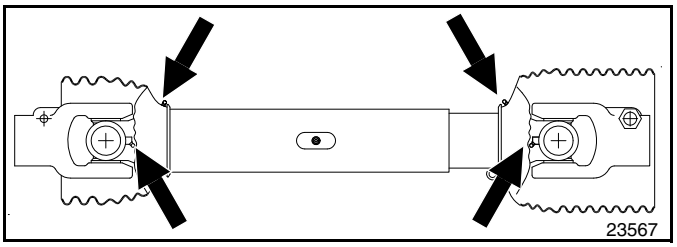


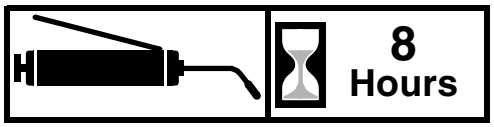


Conventional Main Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

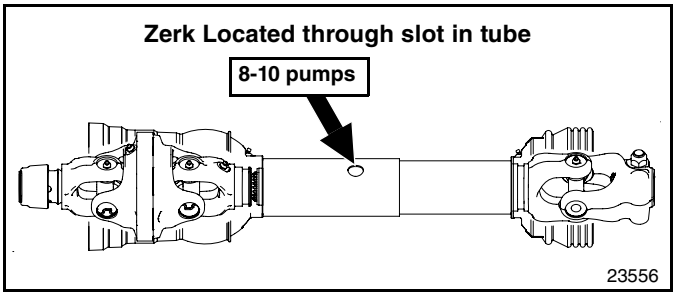
Quantity = Coat Generously

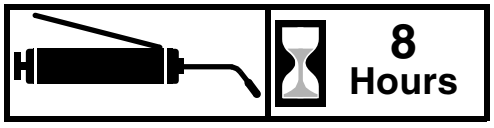




Conventional Main Driveline Joints & Shields

Type of Lubrication: Multi-purpose Grease





CV Main Driveline Profile Tubes With External Grease Point

CV = Constant Velocity
Type of Lubrication: Multi-purpose Grease
Quantity = 8-10 pumps

IMPORTANT: To extend the life of the constant velocity joint, the grease zerk for the profile tubes must be lubricated every 8 hours.

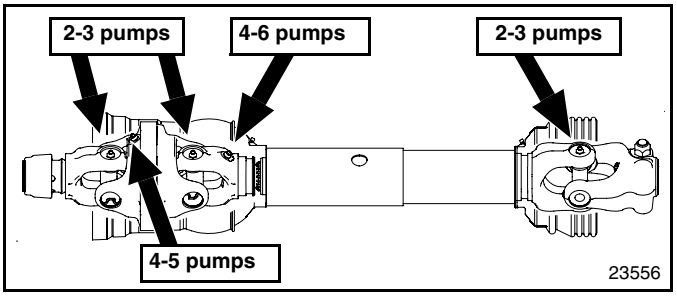
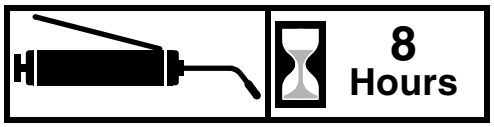


Figure 5-13



CV Main Driveline Joints

CV = Constant Velocity

Type of Lubrication: Multi-purpose Grease

For instructions on how to access grease zerks shown in Figure 5-13: See **"Accessing CV Driveline Joints"** on page 51.

IMPORTANT: To extend the life of the constant velocity joint, extensive lubrication must be performed every 8 hours of operation.

- The constant velocity joint should be greased in a straight position forcing grease through the passages and into the cavity. After lubrication, grease should be visible around the ball joints.
- Grease fittings located on the u-joints and driveline shields should be lubricated every 8 Hrs of operation.

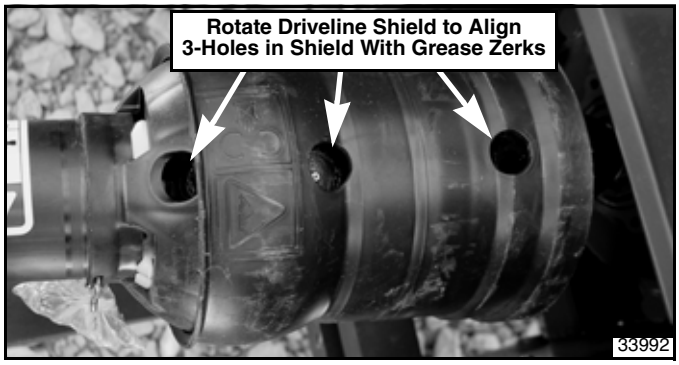
Accessing CV Driveline Joints

Refer to Figure 5-13 on page 50:

There are two ways the constant velocity driveline joints shown in Figure 5-13 can be accessed for lubrication. One is through holes in the driveline shield and the other is to slide the shields back to expose the grease zerks.

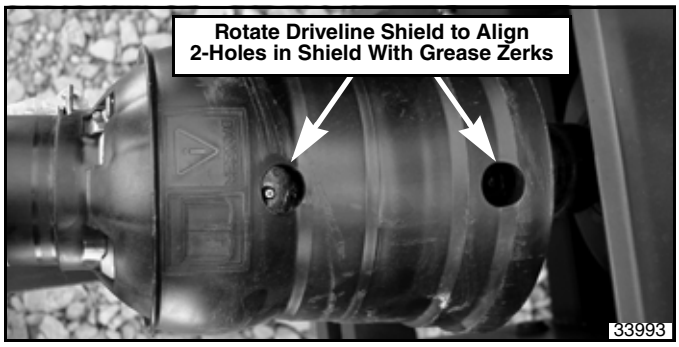
Lubrication Through Access Holes

1. **Refer to Figure 5-14:** Rotate driveline shield until holes in shield align with grease zerks in CV joint.
2. Apply proper amount and type of lubrication. Refer to **"CV Main Driveline Joints"** on page 50 for quantities and type of lubrication.



Lubrication Through Three Holes In Driveline Shield
Figure 5-14

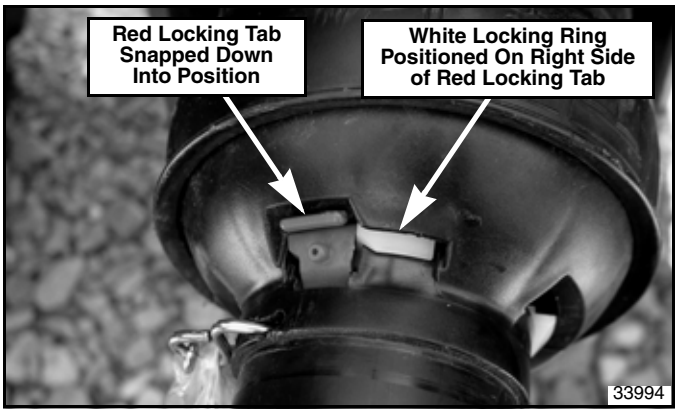
3. **Refer to Figure 5-15:** Rotate driveline shield 180° until holes on opposite side of shield aligns with remaining grease zerks in CV joint.
4. Repeat step 2 above on any grease zerks that were not greased in step 2.
5. Steps 1 thru 2 can be repeated to lubricate universal joint on opposite end of driveline. (Opposite end of driveline has only one grease zerk.)



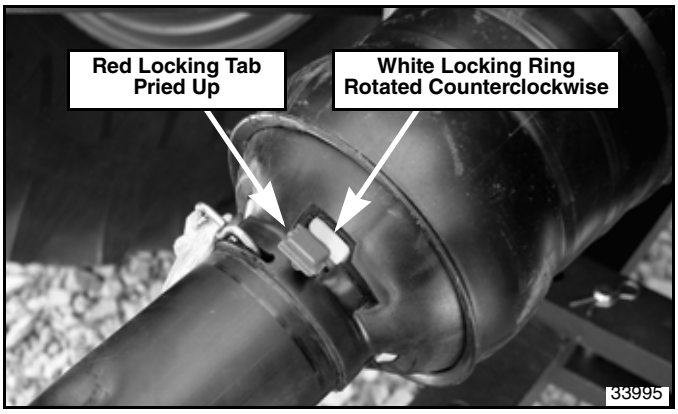
Lubrication Through Two Holes In Driveline Shield
Figure 5-15

Lubrication By Sliding Driveline Shields Back

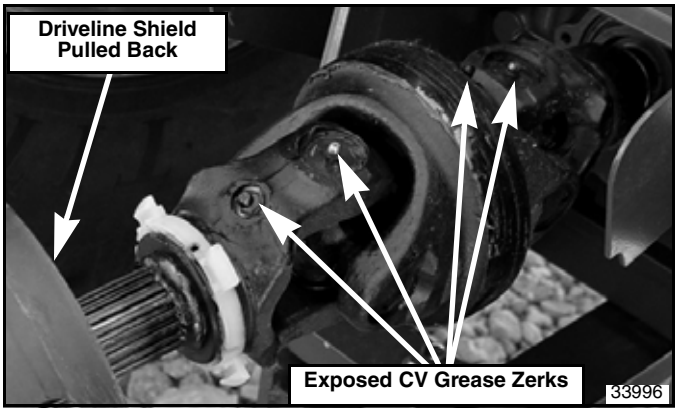
1. **Refer to Figure 5-16:** With a flat bladed screwdriver or similar tool, pry top of red locking tab up.
2. **Refer to Figure 5-17:** Rotate white locking ring fully counterclockwise to the position shown.
3. **Refer to Figure 5-18:** Pull back on driveline shielding until CV joint is exposed.



Locked Driveline Shield
Figure 5-16



Unlocked Driveline Shield
Figure 5-17

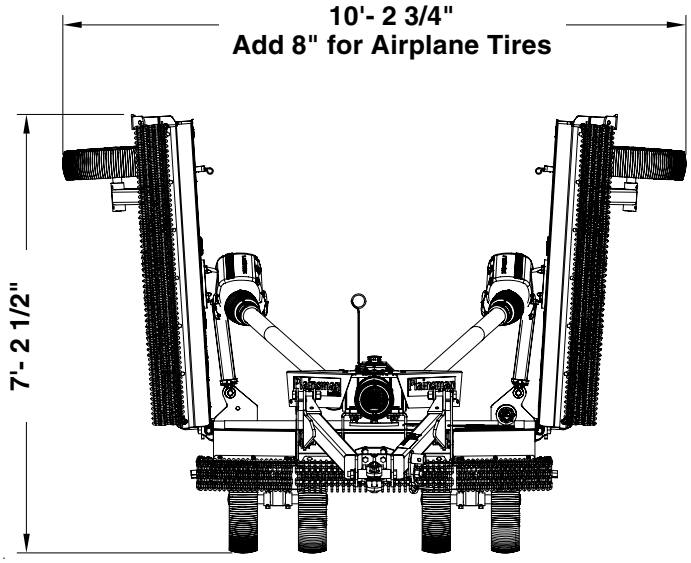


Slide Driveline Shield Back To Expose Grease Zerks
Figure 5-18

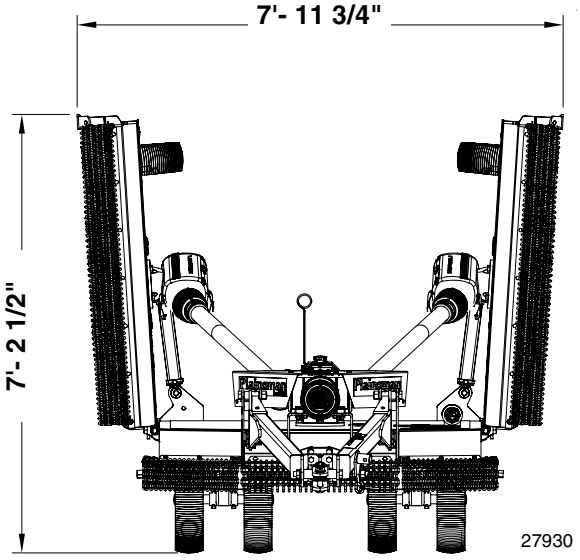
4. Apply proper amount and type of lubrication. Refer to **"CV Main Driveline Joints"** on page 50 for quantities and type of lubrication.
5. Slide driveline shield back to its operating position.
6. **Refer to Figure 5-16:** Rotate white locking ring clockwise and press locking tab down until it snaps in place as shown.
7. Steps 1 thru 6 can be repeated to lubricate universal joint on opposite end of driveline.

RC4015 & RCM4015 Series 2

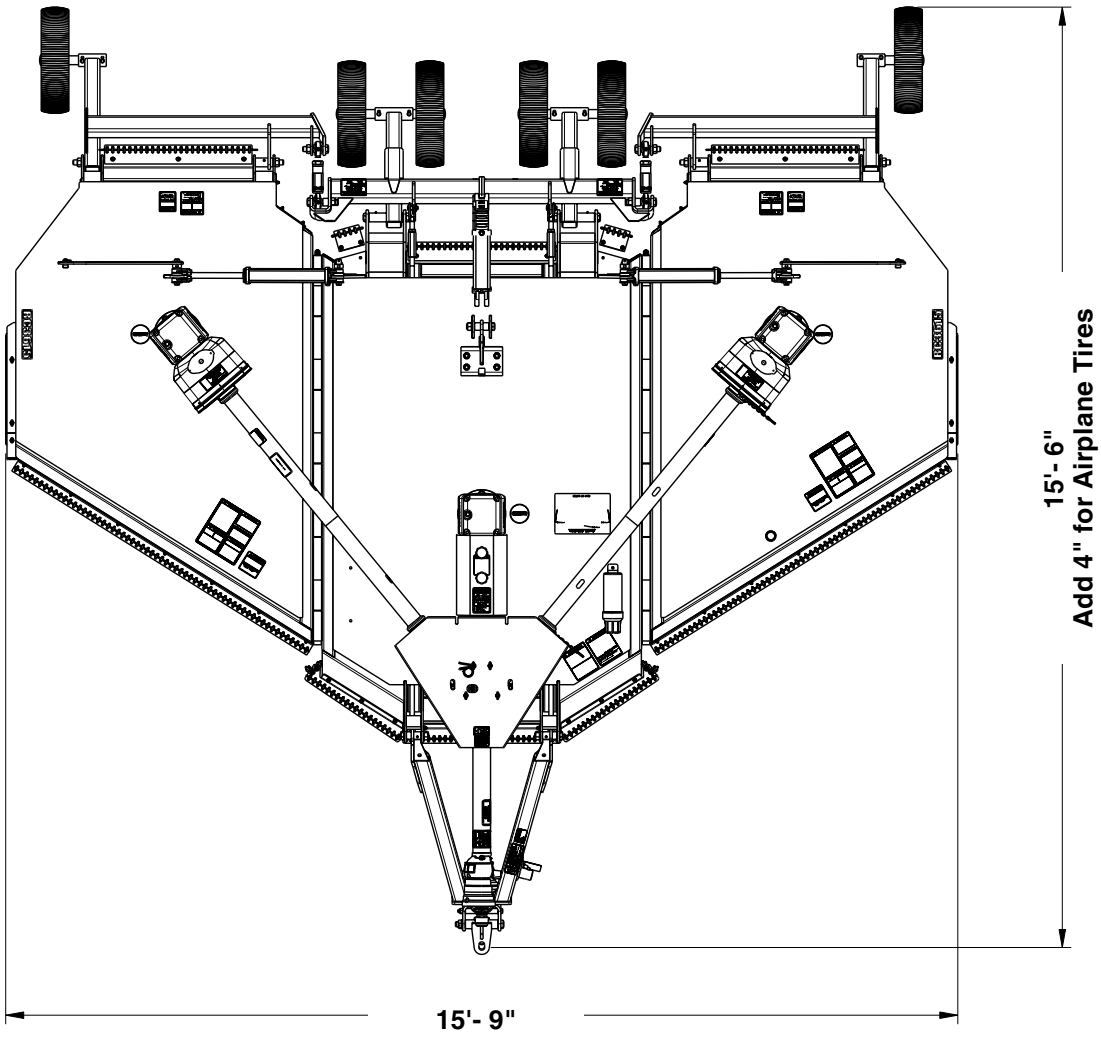
List	Specifications & Capacities
Horsepower Range	50 - 200
Gearbox Horsepower	540 RPM or 1000 RPM 250 HP Divider 210 HP Center & Wings
Gear Box Lubrication	Gear Lube 80-90W EP
Gearbox Oil Capacity	Splitter: 3.5 pints; Center deck & Wings: 6 pints
Cutting Capacity	3 1/2"
Machine Weight Total Weight **Tongue Weight**	3,730 lbs. 1,240 lbs.
Blade Tip Speed At 540 RPM **At 1000 RPM**	Center Blades = 16,300 FPM & Wing Blades = 16,300 FPM Center Blades = 16,300 FPM & Wing Blades = 16,000 FPM
Hitch Types	Standard Clevis, LP Performance Hitch, Bar-Tite Hitch, Ball Hitch, or Pintle Hitch
Hitch Jack	Standard (7,000 lbs.)
Cutting Width **Overall Width** **Minimum Transport Width**	15'-0" 15'-9" 7'-11 3/4"
Overall Length	15'-6" (With center deck raised fully up)
Deck Height	12"
Cutting Height	2" - 14"
Lift Hydraulics	3" x 8" hydraulic cylinder, hoses, fittings & stroke control spacers
Wing Hydraulics	2 1/2" x 12" hydraulic cylinders, hoses & fittings
Wing Transport Protection	Wing Transport Locks
Deck Material Thickness	10 Gauge
Side Skirt Thickness	1/4" Steel
Skid Shoes	Wing Deck: AR400 1 Replaceable skid shoe per wing Center Deck: AR400 2 Replaceable skid shoes
Blades - 6 (2 per Carrier)	1/2" x 4" Heat Treated Free Swinging Alloy Steel with Uplift
Blade Overlap	6"
Blade Bolt	Keyed with hardened flat washer & lock nut
Stump Jumper / Blade Holder	3/16" Thick round dish shaped pan, reinforced with 1" x 4" blade bar
Front & Rear Guards	Optional rubber, single row chain, or dual row chain
Input Driveline 540 & 1000 PTO	Cat. 6 with constant velocity u-joint or Cat. 5 with conventional (non-cv) u-joint
Intermediate Driveline	Standard - Category 4 with Slip-Clutch
Wing Drivelines	Standard - Category 4 with Slip-Clutch
Wheel Options	6" x 21" Laminated tires, 25.5" new foam filled tires, 29" x 16 ply used aircraft tires without foam filling.
Number of Wheels	4 - Wheels: Two on transport axle and one on each wing axle 6 - Wheel option: Four on transport axle and one on each wing axle. 8 - Wheel option: Four on transport axle and two on each wing axle.
Transport Axle	Spring-cushioned on center transport axle
Hubs	Cast iron five-bolt hubs with tapered roller bearings and 1 3/4" shafts.
Deck Rings	Optional
Color Options	Standard color: Beige; Optional colors: Red, Green, Orange, or Yellow.



**Transport Width
Without Special Adjustments**



**Transport Width With Wing Axles Disconnected
At Turnbuckles (#5) And Wheels Folded Back
(See Figure 1-16 on page 17)**



RC4015 and RCM4015 Series 2

Features	Benefits
Surpassed rugged industry standards	All Land Pride Rotary Cutters have been designed and tested and meet rigorous voluntary testing procedures according to ISO 4254.
Factory assembled	Arrives for quick and easy set-up. Minimal time is wasted setting or prepping the unit.
5 Year gearbox warranty	Shows confidence in gearbox integrity.
Rugged heavy built gearboxes	Capable of handling heavy cutting applications.
Gearbox seal protection	Gearbox bottom seal protection for longer bearing life.
2 Piece shield on wing gearboxes	Driveline grease zerks are easier to access.
LP Performance self-leveling hitch	Reduces drawbar wear by keeping hitch level while going through ditches.
Low hitch weight on tractor tongue	Ideal for smaller HP tractors by reducing the amount of weight on the drawbar.
Narrow A-frame hitch	Allows for a tighter turning radius.
Adjustable park jack angle	Park jack can be adjusted to be perpendicular to the ground.
Adjustable driveline hanger	Serves as a support rest for the driveline when the cutter is unhooked from the tractor. Assist operator when attaching driveline to tractor PTO shaft.
Input driveline: Cat. 6 CV or Cat. 5 Conventional	Driveline is matched just right for capacity of tractor. Constant velocity (CV) U-joint allows for 80 degree turns without doing damage to the driveline.
Drivelines with slip-clutches: Cat. 5 intermediate Cat. 4 Wings	Driveline is sized right for the intended cutting capacity. Slip-clutches will slip under load to minimize twist damage to driveline profiles.
Grease zerks on end caps of driveline cross journals	Intermediate and wing driveline cross journals are easier to grease.
High blade tip speed	Allows clean cutting of material.
6" Blade overlap	Eliminates skipping during turns.
Left wing rotates clockwise	Better discharge of material. Picks up tractor tracks.
3/16" Round stump jumper	Standard thick stump jumper material keeps damage to a minimum.
Smooth top design	Reduces accumulation of debris and is easier and faster to clean.
Deck sheet tops are 100% welded	Makes center decks and wing decks stronger.
1/4" Sidewall thickness	Increased thickness reduces damage from objects being thrown into deck sidewalls.
Beveled skid shoes on wings	Reduces gouging the ground when turning.
Hinged wing sections	Allows cutter to follow terrain. Ideal for rough ground where hillsides, ditches, and hollows can cause uneven cutting.
1" Solid hinge rods	Larger diameter hinge rod gives greater strength to the cutter from front to rear, and in the hinge area itself.
Wing transport locks	Wing transport locks will hold wings in the folded position in the event of hydraulic loss.
Enclosed dual leveling rods	Cutter pulls equally on the rear axle while traveling over rough terrain.
5-Bolt hubs	5-Bolt hubs makes the wheel assembly more durable and longer lasting.
Drain holes in wheel rims	Allows water to drain from wheels mounted on folded-up wing. Helps prevent paint deterioration and rusting to the wheel rims.
Spring cushioned center-axle	Protects unit from bumps and ground shock.
Replaceable wheel spindles	Wheel spindles can be replaced when damaged without replacing entire axle assembly.
Wheel options	**Laminated tires:** Eliminates flats. **Air-filled tires:** Give better cushion while transporting. **Foam-filled tires:** Give better cushion while transporting and can't go flat.
LP Performance hitch option	Great for uneven terrain, reduces drawbar wear. Hitch pivots freely up and down and pivots about the tractor drawbar.
Bar-tite hitch option	Ideal for extreme conditions. Clamps tight to drawbar eliminating drawbar wear.
Roadway light kit option	Allows operator to transport on public roads safer.
Deck ring option	Keeps blades from damaging the deck.

Troubleshooting Chart

Problem	Cause	Solution
Oil seal leaking	Gearbox overfilled	Drain oil level with fill hole or to full mark on dipstick.
	Seals damaged	Replace seals.
	Grass or wire wrapped on shaft in seal area	Clean off wrapped material and check seal areas daily.
Driveline yoke or cross failing	Clutch is froze	Slip clutches per instructions under “Drivelines With Slip Clutches” on page 40.
	Shock load	Avoid hitting solid objects.
	Needs lubrication	Lubricate every 8 hours.
Slip Clutches slip even with a light load	Scalping the ground	Raise cutting height.
	Clutch is not properly adjusted	Adjust clutch per instructions under “Drivelines With Slip Clutches” on page 40.
	Clutch plates are worn out	Replace clutch plates.
	Foreign object caught between clutch plates	Remove foreign object.
Bent driveline shaft (Note: Shaft should be repaired or replaced if bent)	Contacting frame	Reduce lift height in transport position.
	Contacting drawbar	Reposition drawbar.
	Bottoming out	Shorten driveline shaft.
	Binding up	Not lubricating enough.
Driveline shaft telescoping tube failing	Shock load	Avoid hitting solid objects.
Driveline shaft telescoping tube wearing	Needs lubrication	Lubricate every 20 hours of operation.
Blades Lock Up	Blades locked together (overlapped) when wings were raised to transport position	Use pry bar or other tool to separate cutting blades before lowering wings.
	Tractor has instant on PTO	Engage PTO at low RPMs and then slowly increase engine speed to full PTO speed. See “Engage Blades” on page 31.
	Tractor has Instant off PTO	Decrease engine speed slowly to an idle and then disengage PTO. See “Disengage Blades” on page 32.
Blades wearing excessively	Cutting on sandy ground	Raise cutting height.
	Contacting ground frequently	Raise cutting height.
Blades coming loose	Blades not tightened properly	Tighten blade hardware, refer to “Cutter Blade Maintenance” on page 38.
	Over speeding PTO	Operate cutter at proper PTO speed.
Blades breaking	Hitting solid objects	Avoid hitting solid objects.
Loose blade carrier	Blade carrier hardware not tight	Tighten shaft nut to specified torque.
	Running loose in the past	Replace gearbox bearings and / or shaft.
Blade carrier bent	Hitting solid objects	Avoid hitting solid objects.
Excessive side skid wear	Soil abrasive	Adjust cutter height.
	Cutting too low	Raise cutting height.
Excessive vibration	Hitting solid objects	Inspect area before cutting. Do not hit solid objects.
	Driveline bent	Replace driveline or distribution shaft.
	Blade carrier bent	Replace blade carrier.
	Blade broken	Replace blade.
	Blade will not swing	Inspect and unlock blades.
	High torque start-up or hitting solid objects.	Disassemble and inspect driveline for incorrectly located needles or damaged bearing cap.
	Blades have unequal weight	Replace each pair of blades on affected carrier.
Wing cylinder movement too slow	Orifice is plugged	Remove elbow fitting and unplug orifice.

Torque Values Chart for Common Bolt Sizes

Bolt Size (inches)	Bolt Head Identification Grade 2		Grade 5		Grade 8	
in-tpi [1]	N · m [2]	ft-lb [3]	N · m	ft-lb	N · m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12
1/4" - 28	8.5	6	13	10	18	14
5/16" - 18	15	11	24	17	33	25
5/16" - 24	17	13	26	19	37	27
3/8" - 16	27	20	42	31	59	44
3/8" - 24	31	22	47	35	67	49
7/16" - 14	43	32	67	49	95	70
7/16" - 20	49	36	75	55	105	78
1/2" - 13	66	49	105	76	145	105
1/2" - 20	75	55	115	85	165	120
9/16" - 12	95	70	150	110	210	155
9/16" - 18	105	79	165	120	235	170
5/8" - 11	130	97	205	150	285	210
5/8" - 18	150	110	230	170	325	240
3/4" - 10	235	170	360	265	510	375
3/4" - 16	260	190	405	295	570	420
7/8" - 9	225	165	585	430	820	605
7/8" - 14	250	185	640	475	905	670
1" - 8	340	250	875	645	1230	910
1" - 12	370	275	955	705	1350	995
1-1/8" - 7	480	355	1080	795	1750	1290
1-1/8" - 12	540	395	1210	890	1960	1440
1-1/4" - 7	680	500	1520	1120	2460	1820
1-1/4" - 12	750	555	1680	1240	2730	2010
1-3/8" - 6	890	655	1990	1470	3230	2380
1-3/8" - 12	1010	745	2270	1670	3680	2710
1-1/2" - 6	1180	870	2640	1950	4290	3160
1-1/2" - 12	1330	980	2970	2190	4820	3560

Bolt Size (Metric)	Bolt Head Identification 5.8 Class 5.8		8.8 Class 8.8		10.9 Class 10.9	
mm x pitch [4]	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
M 5 X 0.8	4	3	6	5	9	7
M 6 X 1	7	5	11	8	15	11
M 8 X 1.25	17	12	26	19	36	27
M 8 X 1	18	13	28	21	39	29
M10 X 1.5	33	24	52	39	72	53
M10 X 0.75	39	29	61	45	85	62
M12 X 1.75	58	42	91	67	125	93
M12 X 1.5	60	44	95	70	130	97
M12 X 1	90	66	105	77	145	105
M14 X 2	92	68	145	105	200	150
M14 X 1.5	99	73	155	115	l215	160
M16 X 2	145	105	225	165	315	230
M16 X 1.5	155	115	240	180	335	245
M18 X 2.5	195	145	310	230	405	300
M18 X 1.5	220	165	350	260	485	355
M20 X 2.5	280	205	440	325	610	450
M20 X 1.5	310	230	650	480	900	665
M24 X 3	480	355	760	560	1050	780
M24 X 2	525	390	830	610	1150	845
M30 X 3.5	960	705	1510	1120	2100	1550
M30 X 2	1060	785	1680	1240	2320	1710
M36 X 3.5	1730	1270	2650	1950	3660	2700
M36 X 2	1880	1380	2960	2190	4100	3220

[1] in-tpi = nominal thread diameter in inches-threads per inch

[2] N· m = newton-meters

[3] ft-lb= foot pounds

[4] mm x pitch = nominal thread diameter in millimeters x thread pitch

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

Additional Torque Values

Blade Bolt Lock Nut	450 ft-lbs
Blade Carrier Hub Nut	450 or 550 ft-lbs minimum
Wheel Lug Nuts	85 ft-lbs

Tire Inflation Chart

Tire Size	Inflation PSI
29" x 7.7 x 15" Aircraft tire	**40**

Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Drivelines: One year Parts and Labor
Gearbox: Seven years Parts and Labor
One year seals and bearings
Hydraulic Cylinder: One year Parts and Labor
Hoses and seals considered wear items
Blades, Tires, and Driveline Friction Discs: Considered wear items.

This Warranty is limited to the repair or replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Land Pride dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of purchase by the end user.

IMPORTANT: The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

Model Number _____ **Serial Number** _____

Corporate Office: P.O. Box 5060
Salina, Kansas 67402-5060 USA